VOLUNTARY DISCLOSURE PRACTICES IN EMERGING CAPITAL MARKETS: THE CASE OF EGYPT

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Voluntary Disclosure Practices in Emerging Capital Markets:

The Case of Egypt

By

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Dedication

To my parents, my wife, and my sons:

Mohamed and *Mahmoud*

Thank you for your love, sacrifice, and support

Declaration

I hereby declare that the material contained in this thesis has not been previously submitted for a degree in this or any other university. I further declare that this thesis is solely based on my own research.

Tarek M. H. Abdel-Fattah

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Abstract

Corporate governance is a crucial issue that is being addressed widely by regulators, and capital market participants around the world. Disclosure is identified as one of the challenges facing the implementation of corporate governance especially in developing countries. The current study aims to contribute to corporate governance and disclosure literature by providing empirical evidence of the relationship between corporate governance, ownership structure and the voluntary disclosure in an emerging capital market, namely Egypt.

The study assesses the extent of total voluntary disclosure and its categories in the annual reports of the most active non financial companies in the Cairo and Alexandria Stock Exchange over four years that witnessed a remarkable initiatives to enhance transparency and corporate governance. It employs a wider theoretical framework based mainly on the political economic approach and benefits from institutional theory.

Using a sample of 182 annual reports of the most active Egyptian listed companies, the findings indicate that while the extent of voluntary disclosure is low, there was a gradual increase in the extent of total voluntary disclosure and its categories over the examined period. However, there is no significant difference between the voluntary disclosure over the four years. This suggests that companies manage their voluntary disclosure policy which is not a random practice but subject to certain influences.

The regression results indicate the board characteristics; board size and board composition; do affect the extent of voluntary disclosure. Interestingly, the findings indicate that the existence of family members on the board has a positive association with the extent of total voluntary disclosure. This suggests that family led companies may have a litigation and reputation cost concern. While the presence of foreign members on the board and board size were found to affect voluntary disclosure positively, the percentage of nonexecutive directors has a negative effect. It was found that government ownership has a marginally effect on voluntary disclosure. Furthermore, the study provides evidence that the determinants of voluntary disclosure vary among the different categories. There was no single variable can explain the total voluntary disclosure and its categories. This highlights the need to analyze the different categories of voluntary disclosure.

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Glossary of Abbreviations

AICPA	The American Institute of Certified Public Accountants
AIMR	The Association for Investment Management and Research
CAO	The Central Auditing Organisation
CASE	The Cairo & Alexandria Stock Exchanges
CIFAR	The Centre for International Financial Analysis and Research
CIPE	Centre for International Private Enterprise
CMA	The Capital Market Authority
CML	Capital Market Law
EGID	Egypt for Information Dissemination
EIoD	The Egyptian Institute of Directors
ESAs	Egyptian Standards on Auditing
GLS	Generalized Least Squares
IASs	International Accounting Standards
IFC	International Finance Corporation
IMF	The International Monetary Fund
ISA	International Standards of Auditing
ISE	Istanbul Stock Exchange
IWS	Internet World Stats
KLSE	Kuala Lumpur Stock Exchange
MENA	Middle East and North Africa
NIE	New Institutional Economics
NIS	New Institutional Sociology
OECD	Organization for Economic Cooperation and Development
OLS	Ordinary Least Squares
SSE	Swedish Stock Exchange
TSE	Tokyo Stock Exchange
TVDS	Total Voluntary Disclosure Score
WFE	World Federation of Exchanges

Chapter One: Introduction

1.1 Background

Voluntary disclosure can be seen as a response to several factors such as changes in capital markets, changes in business environments and/or globalization (Healy and Palepu 2001). Currently, there is an increasing global concern about the issue of corporate governance in general and disclosure and transparency in particular. One of the key reasons for such concern is the scandals in a number of developed markets around the world. Disclosure and transparency have been identified as reasons for these scandals. This raises questions about the possibility of future similar scandals in emerging capital markets that arguably lack institutions efficient enough to absorb the expected negative effects. Therefore a number of emerging capital markets have started reform programmes lead by the international capital provider, the International Finance Corporation (IFC) and the World Bank.

However, disclosure is identified as one of the biggest challenges facing the implementation of corporate governance especially in developing countries (CIPE 2003). Moreover, the poor levels of corporate disclosure have been identified as one of the factors that have not only contributed to the Asian financial crisis but are also a stumbling block in the regional economic recovery (Berardino, 2001 as cited in Gul and Leung, 2004).

Emerging capital markets have expressed their concern about such issues through their regulators and governments. To legitimize themselves, the governments in countries with emerging capital markets have announced that corporate governance and higher levels of disclosure and transparency have the highest priority in their reform programmes. In this regard, a number of regulations and structures have been changed. For example, local corporate governance codes, mostly based on the Organization for Economic Cooperation and Development OECD principles, have been issued in many emerging capital markets over the last few years. This raises a question about the relevance of such western concepts to emerging capital markets that do not share the same characteristics as the developed markets. However, it is essential to have a diagnostic view of the disclosure practices in such emerging capital markets. The current research aims to address the voluntary disclosure practices in an emerging capital market, namely Egypt.

1.2 The objective of the study

The current study concentrates on the non-financial listed companies in the Cairo and Alexandria stock Exchange (CASE) as an emerging capital market. It aims to assess the voluntary disclosure practices in corporate annual reports over a period of remarkable initiatives, establishing the Egyptian institute of directors and issuing the Egyptian code of corporate governance. In addition, it seeks to identify the determinants of voluntary disclosure practice by examining its association with a number of corporate governance characteristics, ownership aspects and firm characteristics. To achieve this goal, the research has the following objectives:

- To evaluate the extent of total voluntary disclosure and its categories in corporate annual reports.
- To investigate whether there are significant differences in the extent of total voluntary disclosure and its categories over the period of study.
- To assess the relationship between voluntary disclosure and corporate governance, ownership structure and firm characteristics.

1.3 The importance of the study

The current study can be distinguished from prior studies in the following areas:

First, the study contributes to two streams of literature, the disclosure literature and corporate governance literature, by providing up to date empirical evidence on the association between voluntary disclosure practices and corporate governance characteristics in one of the Middle East and North African countries (MENA), Egypt, where disclosure studies are relatively limited compared to developed countries and Asian emerging markets (Huafang and Jianguo, 2007). To the best of my knowledge, there is no prior empirical study, at the time of conducting this study, concerning the voluntary disclosure and its relationship with corporate governance in the Egyptian context. So, it can be argued that the current study provides new evidence from a country that may be considered as a representative of Arabic and African countries.

Secondly, the study contributes to the recent debate as to whether family led companies provide more or less disclosure (e.g. Ajinkya et al, 2005; Karamanou and Vafeas, 2005; Ali et al, 2007 and Chen et al 2008). It investigate whether the existence of family members on the board affects the extent of voluntary disclosure practices in corporate annual reports of the most active Egyptian listed companies.

Thirdly, the study addresses voluntary disclosure practices over the period of considerable changes in the business environment in general and the capital market in particular. The period of the study has witnessed, among other changes, the first application of the new listing rules and the issuance of an Egyptian corporate governance code.

Fourthly, the study extends the approach of Meek et al (1995) that is commonly cited in disclosure literature by analyzing voluntary disclosure based on narrow groups of items instead of wider groups. It investigates overall voluntary disclosure and the different types of voluntary disclosure: general information, financial information, non-financial information, future information, corporate governance information, shareholder information, and social responsibility information. Such analysis provides more explanations and outlines the areas of possible improvements. It becomes more important with longitudinal studies.

Fifthly, the current study recognizes the lack of a comprehensive theory that can fully explain voluntary disclosure. It responds to the call to employ a wider theoretical view, theoretical triangulation, by employing a theoretical framework that is based mainly on the political economic approach: stakeholders, legitimacy, political costs theories; and the new institutional theory. Such a framework may help to broaden the scope of analysis and deepen it. The empirical section examines the applicability of such theories in emerging capital markets.

Sixthly, the current study is considered to be a response to the call for more research to examine factors that contribute to the change of corporate voluntary disclosure over time by conducting a longitudinal study (e.g. Huafang and Jianguo, 2007). The study uses panel data analysis which is rarely used in disclosure literature (Hassan et al., 2006). "Panel data give more informative data, more variability, less collinearity among variables, more degree of freedom and more efficiency" (Gujarati, 2003, p.637). Longitudinal studies can help to shed further light on the process whereby voluntary disclosure practices evolve over time.

Finally, the current study employs two types of statistical analysis: parametric and non parametric regression. Along with pooled Ordinary Least Square OLS and panel

Generalized Linear Model GLS estimation, the study employs more elaborate techniques, namely censored-normal regressions (Tobit), and Quantile regressions, which are not commonly used in the disclosure literature although they are more relevant to the measurement method of disclosure extent.

1.4 Research questions and hypotheses:

Disclosure and transparency is considered to be one of the crucial factors that underpin emerging capital markets and economic development in general. To improve financial reporting, it is important to study not only the extent and the trend of disclosure practices, but also the factors explaining or influencing corporate financial reporting (Rizk, 2006). To achieve the objective of the study the following research questions have been formulated:

1. **To what extent do Egyptian listed companies disclose more information voluntarily in their annual reports?**
2. **How do voluntary disclosure practices in the annual reports of Egyptian listed companies evolve over time?**
3. **What are the determinants of voluntary disclosure in the annual reports of Egyptian listed companies?**

The first two questions will be answered by applying a descriptive analysis of the total voluntary disclosure and its categories in the annual reports over the period of the study. The results of the checklist, the research instrument, will be analyzed on the three levels of disclosure: total, category and item by item. Also these results will be analyzed year by year to outline the trend of voluntary disclosure over the examined period. Statistical tests will be employed to investigate whether there is a significant difference in the extent of voluntary disclosure practices over the period of the study.

To answer the third question, three main hypotheses related to corporate governance characteristics, ownership aspects, and firm characteristics have been developed. These hypotheses are as follows:

H.1 there is an association between a number of corporate governance characteristics and the extent of voluntary disclosure in the annual reports of the most active Egyptian listed companies.

To test this hypothesis, the following sub hypotheses have been developed:

> **H1.1** there is a negative association between role duality and the level of voluntary disclosure in annual reports of the most active Egyptian listed companies.
>
> **H1.2** there is an association between the proportion of non-executive directors and the level of voluntary disclosure in annual reports of the most active Egyptian listed companies.
>
> **H1.3** there is an association between the presence of family members on the board and the level of voluntary disclosure in annual reports of the most active Egyptian listed companies.
>
> **H1.4** there is a positive association between the presence of foreign members on the board and the level of voluntary disclosure in annual reports of the most active Egyptian listed companies.
>
> **H1.5** there is an association between board size and the level of voluntary disclosure in the annual reports of the most active Egyptian listed companies.

The second main hypothesis is related to ownership structure:

H.2 there is an association between a number of ownership aspects and the extent of voluntary disclosure in the annual reports of the most active Egyptian listed companies.

Three sub hypotheses can be developed under this hypothesis:

H2.1 there is a negative association between block holder ownership and the level of voluntary disclosure in the annual reports of the most active Egyptian listed companies.

H2.2 there is an association between governmental ownership and the level of voluntary disclosure in the annual reports of the most active Egyptian listed companies.

H2.3 there is an association between institutional ownership and the level of voluntary disclosure in the annual reports of the most active Egyptian listed companies.

The third main hypothesis is about firm characteristics:

H.3 there is an association between a number of firm characteristics and the extent of voluntary disclosure in the annual reports of the most active Egyptian listed companies.

To test this hypothesis, seven sub hypotheses representing variables related to firm structure, firm performance and the market have been developed:

H3.1.a there is a positive association between firm size measured by total assets and the level of voluntary disclosure in annual reports of the most active Egyptian listed companies.

H3.1.b there is an association between gearing measured by the ratio of total debt to equity and the level of voluntary disclosure in annual reports of the most active Egyptian listed companies.

H3.2.a. there is an association between profitability measured by return on equity and the level of voluntary disclosure in annual reports of the most active Egyptian listed companies.

H3.2.b there is an association between liquidity measured by current ratio and the level of voluntary disclosure in annual reports of the most active Egyptian listed companies

H3.3.a there is an association between industry type measured by dummy variable (1 for manufacturing company, 0 for non manufacturing) and the level of voluntary disclosure in annual reports of the most active Egyptian listed companies.

H3.3.b there is a positive association between cross listing and the level of voluntary disclosure in annual reports of the most active Egyptian listed companies.

H3.3.c there is an association between audit firm and the level of voluntary disclosure in annual reports of the most active Egyptian listed companies.

1.5 Research Methodology

It is argued that multiparadigm approaches can generate more complete knowledge than can any single paradigmatic perspective (Gioia and Pitre, 1990). The research philosophy of the current study is based on the interpretivist - functionalist transition zone as a multiparadigm approach. Such approach links both of interpretivist and functionalist paradigms and provides an opportunity to benefit from a wider theoretical framework. It allows for providing a descriptive analysis to voluntary disclosure practices in corporate annual reports of Egyptian listed companies that lack prior studies. Furthermore, it allows also to use the deductive approach to examine, empirically, the association between the extent of voluntary disclosure and a number of corporate governance characteristics, ownership aspects and firm characteristics.

The deductive approach requires developing hypotheses based on a theory. The current study employs a theoretical framework that benefit from integrating a number of disclosure theories, based mainly on the political economic approach. Also it benefits from the concept of isomorphism to explain how voluntary disclosure practices evolve over time. As such, the study is considered to be an quantitative study. It measures the extent of total voluntary disclosure and its categories in the corporate annual report based on a self constructed checklist of voluntary disclosure items and using an un-weighted disclosure index. The most active non financial listed companies in the Cairo and Alexandria Stock Exchange (CASE) represent the sample population in the current study. The period of study covers the four years from 2003 to 2006. The final sample consists of 64 companies with 182 firm year observations.

1.6 Structure of the thesis

This section presents an overview of the structure of the current study. Chapter two reviews the disclosure literature. It explores the relationship between voluntary disclosure and the fairness in disclosure and justifies the use of annual reports in the current study. The concept of corporate governance and its relationship to disclosure and transparency has been outlined. Previous disclosure studies have been reviewed on three sub-sections: traditional disclosure studies that explain variation in disclosure by firm characteristics, disclosure studies that consider corporate governance characteristics as determinants of disclosure, and the prior disclosure studies in the Egyptian context. This chapter ends with an outline of the gap in the literature to which the current study aims to contribute.

Chapter three presents an overview of the Egyptian environment as the context of the study. It aims to justify why the Egyptian context is considered to be excellent opportunity to address the issue of voluntary disclosure and corporate governance. It starts with general information about Egypt. Then it provides a summary of the economic conditions and the stages that Egyptian economy has been through. It also highlights the Egyptian capital market and regulatory change; new listing rules and corporate governance code. A review of the accounting profession and the financial reporting requirements that govern the disclosure practices has been presented.

Chapter four outlines the theoretical framework used in the current study. It reviews the different theories that can be used to explain the voluntary disclosure practices. The chapter classifies these theories into five approaches: regulatory, pure economic, political economic, socio economic, and cost benefit approaches. Based on this critical review, the chapter ends with the proposed theoretical framework for the current study. It makes it clear that there is no single theory can fully explain the voluntary disclosure practices.

Chapter five presents the bridge that articulates the theoretical section with the empirical section of the current study. Research philosophy, ontological and epistemological perspectives and research paradigm are outlined. It justifies using multiparadigm approach in the current study. Then it moves to present the research design and research instrument. The sources of data and the operational measures of the independent variables are identified. The chapter shows how the disclosure checklist has been constructed. This chapter ends with the statistical techniques used in the current study to carry out the empirical section.

Chapter six is allocated to present the research hypotheses of the current study. The main hypotheses have been developed based on the proposed theoretical framework in chapter four, the evidence from prior empirical studies in chapter two, and the Egyptian context in chapter three. The three main hypotheses are related to the association between voluntary disclosure and each of corporate governance, ownership structure and firm characteristics. This chapter divides each of the main hypotheses into a number of sub hypotheses that will be tested in the empirical section.

Chapter seven aims to answer the first two research questions: what is the extent of total voluntary disclosure and its categories in the annual reports of the most active companies, and how do voluntary disclosure practices evolve over time. It starts with discussion of the reliability and validity of the research instrument, the disclosure index and continues to provide a descriptive analysis to the results of the checklist designed to measure the extent of voluntary disclosure; the dependent variable. Three levels of analysis are presented in this chapter: the aggregate level, the category or type of information, and item by item.

Chapter eight aims to answer the third research question: the determinants of voluntary disclosure practices. It starts with a descriptive analysis of the independent variables. Two types of analysis are employed in this chapter, bivariate and multivariate analyses. It summarizes the results of regression diagnostics before choosing the suitable statistical technique. OLS and GLS regressions have been employed and Tobit and Quantile regressions have been used to add robustness to the results. The chapter ends with a discussion of the results and testing of the hypotheses developed in chapter six.

Finally, chapter nine presents a summary of the findings of the study and the contribution to the knowledge. In addition it outlines the limitations and suggests a number of recommendations for future research.

Chapter Two: Disclosure and Corporate Governance: Literature Review

2.1 Introduction

Disclosure is an important variable in any measurement of accounting quality (Marston and Robson, 1997). The amount of research focusing on the central theme of disclosure has been growing rapidly in recent years (Beattie 2005). It is argued that disclosure and transparency, accountability, and corporate governance play an important role in gaining the market confidence (Ghazali and Weetman, 2006). The previous chapter provided an overview of the present study. The current chapter reviews the relevant prior studies concerning accounting disclosure and factors affecting disclosure practice. It aims to provide a clear idea about the prior studies and to link the current study with disclosure literature. In particular, it aims to identify the nature of the gap to which the current study aims to contribute to the literature by filling it. Moreover, this will add to the consistency of the current study. Reviewing the literature is the base that will help to choose the relevant theoretical framework to the study and to extract the research hypotheses and methodology.

Section 2.2 and 2.3 outline the concept of voluntary disclosure and corporate governance. Section 2.4 reviews the relevant prior disclosure studies that explain disclosure by firm characteristics and those that address voluntary disclosure and its categories. The empirical studies related to the relationship between corporate governance rules and the extent of disclosure are reviewed in section 2.5. Prior disclosure studies in the Egyptian context are reviewed in section 2.6. Finally, the gap which the current research can contribute to filling is presented in section 2.7.

2.2 Corporate disclosure: overview

This section highlights the need of voluntary disclosure and its relation to the principle of fairness in disclosure. It defines what is meant by voluntary disclosure in the current study. In addition, it justifies using corporate annual reports in the current study.

2.2.1 Fairness in disclosure and voluntary disclosure

Disclosure is the process by which accounting measurements are communicated to their intended users (Choi and Meek, 2008). However a number of questions, such as what information is to be reported and to what extent, when, how and to whom must the company disclose, need be answered. Disclosure can be classified into two types: mandatory disclosure and voluntary disclosure. The former is governed by the disclosure requirements that companies should comply with while the latter is subject to managerial decision.

It is argued that the reliance on the disclosure requirements or rules has created some limitations and unfairness in reporting and disclosure (Riahi-Belkaoui, 2002). Therefore, theorists and practitioners have begun to recognize the inherent shortcomings of traditional reporting and have developed models for additional voluntary disclosure (Schuster and O'Connell, 2006).

To eliminate this unfairness, the accounting profession now directs more attention to the issue of financial reporting. One of the attempts of the American Institute of Certified Public Accountants (AICPA) to improve financial reporting is the establishment of the Jenkins Committee in 1991. In its report issued in 1995, five broad categories of information have been proposed by the committee to be disclosed. These categories include financial and non-financial data, management's analysis of the financial and non-financial data, forward–looking information, information about management and shareholders and background about the company.

However, the Jenkins committee report focuses only on specific groups of users, investors and creditors. This can be deduced from the title of the report: "*The Information Needs of Investors and Creditors*". This may be consistent with the notion of agency theory that shareholders are the main principal. But there are many users or stakeholders who are interested in the firm and have information needs about the firm and its performance that should be satisfied, such as employees, government, and society. Therefore, there is a call for expanded disclosures that also include other information such as human resource and social responsibility (for more details, see Riahi-Belkaoui, 2002).

Another example of the attention paid to the issue of voluntary disclosure is the establishment of the Steering Committee in 1998, by the Financial Accounting Standard Board FASB. One of the three reports of this committee was entitled "*Improving Business Reporting: insights into enhancing voluntary disclosure*". The primary conclusion of the committee is to allow investors and other financial statement users to see the company "through the eyes of management" (Boesso, 2002).

Riahi-Belkaoui (2002) indicates that

> *"The principle of fairness in disclosure calls for an expansion of the conventional accounting disclosures to accommodate all the other interest groups, in addition to investors and creditors, that have a vested interest in the affairs of the firm"*. (p.206)

As a supplier of the desired information, corporate management recognizes the demand for information and has incentives to satisfy such a demand. In this regard, Schuster and

O'Connell (2006) indicate that disclosing additional information voluntarily represents one method that management can use to increase managerial credibility and to re-establish a relationship of trust with their stakeholders.

The main theme of the current study is voluntary disclosure. While there are a large number of studies which address voluntary disclosure, it can be said that there is lack of a clear-cut definition of the term of voluntary disclosure. Debreceny and Rahman (2005:b) state that:

> "*It is difficult if not impossible to provide a precise and universally accepted definition of voluntary disclosure*" (p.286)

The expression 'voluntary disclosure' indicates that this disclosure is discretionary and subject to the decision of management. There is no formal obligation for the company to disclose more information voluntarily. In other words, no legal or formal action will be taken if a company does not disclose information more than the requirements. Meek et al (1995) indicate that voluntary disclosures – disclosures in excess of the requirements – represent free choices on the part of management to provide information that is considered to be relevant to the users of annual reports.

Previous disclosure studies describe the term voluntary disclosure as items of information that are disclosed over and above the mandatory requirements (e.g. Cooke, 1989; Ho and Wong, 2001a; Barako et al. 2006). For the purpose of the current study, the researcher follows the disclosure literature and defines voluntary disclosure in annual reports as

> "*Items of information, quantitative or qualitative, that companies disclose in their annual reports above the mandatory requirements specified in accounting standards and / or other regulations*".

This definition will govern the process of choosing information items that will be included in the instrument used to measure the extent of voluntary disclosure. Although other routes for voluntary disclosure can be used, the current study focuses on the corporate annual report as the main channel for transmitting information. The following section explains the rationale behind using annual reports in the current study.

2.2.2 Rationale behind using annual reports

Many channels can be used for communicating between the company and the stakeholders. The annual report is one of these channels which include also among others, websites, press releases, conference calls. The annual report is considered to be the oldest way to disseminate information to the stakeholders. Botosan (1997) argues that:

> "*Although the annual report is only one means of corporate reporting, it should serve as a good proxy for the level of voluntary disclosure provided by a firm across all disclosure avenues...the annual report is generally considered to be one of the most important sources of corporate information*". (pp. 330-331)

Moreover, Choi and Meek (2008) state that:

> "*Annual report disclosure practices reflect managers' responses to regulatory disclosure requirements and their incentives to provide information to financial statements users voluntarily*". (p. 156)

The current study focuses on the annual reports due to several reasons. The key reason is related to the nature of the current study that is intended to be a longitudinal study, using panel data for four years. Therefore, the annual reports represent the best available channel and the most relevant one to the purpose of the current study. In general, annual reports are more accessible for research purposes (Haniffa and Cooke, 2005). Online reporting or using corporate website is considered to be sensitive to time. Information disclosed online may be changed over short period of time. So online reporting may not be practically relevant to the current study that covers the last four years at the time of conducting the study. Moreover, the internet usage in developing countries is less than in developed countries. So, the relative importance and credibility of annual reports in developing countries may be more than other means of disclosure . In Egypt, the percentage of internet usage is still low, it was 7% for the year 2006 (IWS, 2007). The other methods of communications have the same problem.

Furthermore, the annual report is the oldest and the more familiar channel to disseminate information to different users, especially in developing countries (Marston & Shrives, 1991). However, corporate voluntary disclosure of specific types of information, such as management forecasts, is rare in some developing countries (Huafang and Jianguo, 2007). A corporate annual report includes the auditor's report which adds credibility to the financial statements and the notes that may include voluntary information in addition to the mandatory one. In other words the credibility of the annual report may encourage managers to use it to disclose more information voluntarily.

In addition, using corporate annual reports as the unit of analysis facilitates comparison between companies that are required to submit these reports annually whatever the specific events that may need to be disclosed immediately (Haniffa, 1999). Another feature of examining corporate annual reports is the possibility to investigate large numbers of companies. Moreover, comparing the annual reports of different companies over different years may be easier than comparing the other means of disclosure. A large number of prior disclosure studies used corporate annual reports, either in developed countries such as, UK, Firth, 1979; Sweden, Cooke, 1989; Japan, Cooke, 1991 and 1992; Australia, Gibson and O'Donovan, 2007, or developing countries, for example, Hong Kong, Ferguson et al, 2002; Malaysia, Haniffa and Cooke, 2002 and 2005; Kenya, Barako et al. 2006; China, Huafang and Jianguo, 2007; and Wang et al, 2008.

Furthermore, there is evidence that the annual report is an important channel of communication with stakeholders (Chang and Most, 1985). The report is considered to be the most important source of information for financial analysts and investors in developing countries (Huafang and Jianguo, 2007). Also, there is evidence of a positive correlation between the disclosure extent in the annual reports and the disclosure through other means (Botosan, 1997; Lang and Lundholm, 1993; Botosan and Plumlee 2002). This may suggest that companies coordinate their overall disclosure policy (Hussainey, 2004).

It is noteworthy that Marston and Robson (1997) indicate that there is no disclosure index or other measurement instrument that has yet been designed which captures all the disclosure routes, such as annual reports, press releases, and interim reporting.

As such it is clear that voluntary disclosure plays a crucial role to achieve fairness in disclosure. It is commonly agreed that more transparent companies disclose more information voluntarily. Disclosure and transparency issues have been identified as a reason for the recent financial scandals around the world; e.g. ENRON, WORLDCOM. In general, these financial scandals highlight the need for sound corporate governance practices that include, among others principles, disclosure and transparency. Disclosure literature has now extended to address the influence of corporate governance characteristics on the extent of disclosure. Before reviewing the prior empirical studies, the following section presents an overview of the concept of corporate governance and its relationship to disclosure and transparency.

2.3 Corporate governance and disclosure policy

Corporate governance is a crucial issue that is being addressed widely by regulators and capital market participants around the world. Business environments face some problems in accounting, auditing and corporate governance that have undermined the quality and integrity of financial reporting (Imhoff, 2003). One of underlying questions in this regard concerns the appropriateness of western concepts and systems in developing countries. This question has been raised again with corporate governance. The question is whether the code of corporate governance (principles) is suitable for (developing countries) emerging capital markets. While much of the focus in corporate governance literature has been on corporate governance systems in highly developed countries, there has been much less discussion of corporate governance institutions in developing countries (Mueller, 2006).

2.3.1 Corporate governance: overview

There are many definitions of corporate governance. Generally these definitions can be classified into two groups: narrow definition which focuses on corporate accountability to shareholders (shareholder-oriented), and broader definition which focuses on corporate accountability to stakeholders (stakeholder-oriented). Keasey et al. (2005) indicate that the expression of corporate governance carries different interpretations and its analysis also involves diverse disciplines and approaches. According to the second group, corporate governance can be defined as follows:

"the system of checks and balances, both internal and external to companies, which ensure that companies discharge their accountability to all their stakeholders and act in a socially responsible way in all areas of their business activity". (Solomon, 2007, p.14).

Corporate governance is the system by which business corporations are directed and controlled. The structure of corporate governance identifies rights and responsibilities lines among different corporate participants and specifies the rules and procedures for making decisions on corporate affairs. In addition, corporate governance ensures that all major stakeholders receive reliable information about the value of the firm and motivates managers to maximize firm value instead of pursuing personal objectives (Luo, 2005).

Mueller (2006) distinguishes between two types of corporate governance institutions: institutions that are common to all companies in a country, such as law and legal institutions, and institutions that differ from company to company within a country, such as the number of members on the board of directors and the percentage of outsiders on the board. Tricker (1984) suggests that corporate governance can be classified into four groups of power: ownership power, corporate director's power, management power, and institutional power.

Luo (2005) indicates that corporate governance works through three mechanisms: market-based mechanisms (e.g. board composition, board size, market discipline, board chairmanship, executive compensation, and interlocking directorate); culture-based mechanisms (e.g. governance culture and corporate integrity); and discipline-based mechanisms (e.g. executive penalty, internal auditing, conduct codes, and ethics programmes). However, Imhoff (2003) indicates that accounting and auditing are components of the broader system of corporate governance, and can't be fixed in any lasting way without substantive changes in the overall governance process. Gul and Leung (2004) point out that recent trends in the literature suggest that the role of corporate governance is best examined in the context of a ''package'' of corporate governance mechanisms i.e. the role of two or more corporate governance mechanisms (See: Kosnik, 1987; Singh and Harianto, 1989; Rediker and Seth, 1995).

However, it should be noted that most corporate governance literature focuses on a market based mechanism, the first mechanism of Luo's classification. Anand (2005) points out that the concept of corporate governance continues to expand. He indicates that most of the corporate governance definitions speak only of the relationships between those who run the company and those who invest or otherwise deal with it. Thus he suggests that a more appropriate definition of corporate governance includes additional components such as disclosure of board composition, including the number of independent directors on the board; composition of various committees of the board, and separation of the chair of the board and the CEO.

Table 2.1 shows the first corporate governance codes of practice or policy documents for countries around the world. As can be noticed from the table, there has been an explosion of corporate governance codes of practice over the last decade. Many of these codes are voluntary codes proposed by institutions or bodies interested in improving the methods of corporate management (Roberts et al., 2005). A large amount of corporate governance literature addresses the effect of corporate governance practices, especially the attributes of the board of directors and its committees, on firm performance and recently it was extended to corporate disclosure policy.

Table 2.1 Corporate governance diffusion: first codes of practice or policy documents

Year	Countries
1992	UK
1994	Canada , and South Africa.
1995	Australia, and France.
1996	Spain
1997	Japan, The Netherlands, and USA.
1998	Belgium, Germany, India, Italy, and Thailand.
1999	Brazil, Greece, Hong Kong, Ireland, Mexico, Portugal, South Korea, OECD, ICGN, and Commonwealth.
2000	Denmark, Indonesia, Kenya, Malaysia, Romania, and The Philippines.
2001	China, Czech Republic, Malta, Peru, Singapore, and Sweden.
2002	Austria, Cyprus, Hungary, Pakistan, Poland, Russia, Slovakia, Switzerland, and Taiwan.
2003	Finland, Lithuania, Macedonia, New Zealand, Turkey, Ukraine, and Latin America.
2004	Bangladesh, Iceland, Norway, Slovenia, OECD.
2005	Jamaica, ICGN, and Egypt.

Source: adapted from Solomon (2007) p.188

2.3.2 Theoretical base of corporate governance

Theoretically, corporate governance has been explained and analyzed using different theoretical frameworks such as agency theory, stakeholder theory, and stewardship theory. There is some kind of relationship among these frameworks. However, Parum (2005) indicates that corporate governance does not have an accepted theoretical base or commonly accepted paradigm as yet.

Reviewing corporate governance literature, it can be noticed that agency theory and stakeholder theory are the dominant theories. Mueller (2006) points out that central to any discussion of corporate governance is the question of how well a particular set of institutions mitigates the various principal agent problems that arise in a firm. However, a number of studies, such as Haniffa and Cooke (2005), use legitimacy theory to address the potential effects of culture and corporate governance on social disclosure.

Agency theory is derived from the pure economic approach which suffers from some limitations. It is based on the desire for income and avoiding loss. Consequently, it focuses on profit maximization as a main goal of managers and ignores other goals. Also, this approach concentrates only on two stakeholder groups, managers and shareholders, and pays no attention to other interested parties in society, such as government, employees, taxation authorities and consumer groups. Therefore, a number of authors argue that corporate governance is too often viewed from a perspective that focuses solely on the relationship between shareholders and managers. They believe that this perspective no longer seems sufficient. Moreover, additional perspectives which consider other parties or stakeholders and the great changes and complexity in business environments ma y be helpful. (Van den Berghe, 2002 as cited in Parum, 2005). Consistent with this view, Crowther and Jatana (2005) indicate that agency theory is considered to be a cause of failure in corporate governance.

In this regard, it is possible that the reason for using different theoretical frameworks may be the lack of a generally accepted definition of corporate governance and its components. While agency theory may be suitable for narrow definition, stakeholder theory may be relevant for broad definition. Moreover, the question of who is the principal is the source of difference between agency and stakeholder theories. While the principal in agency theory is the shareholders, the stakeholder theory extends the concept of principal to include other interested parties beside shareholders.

Because shareholders' interests can only be satisfied by taking account of stakeholder interests, Solomon (2007) argues that theoretical frameworks that suggest companies should be accountable only to their shareholders are not necessarily inconsistent with theoretical frameworks that champion stakeholder accountability.

2.3.3 Disclosure and transparency

Disclosure lies at the centre of nearly all corporate governance statutes and codes. For example, disclosure and transparency is one of the principles of corporate governance issued by the Organization for Economic Cooperation and Development (OECD). According to this principle, timely and accurate disclosure is required on all material matters regarding the company, such as financial and operating performance, ownership and voting rights, related party transactions, board composition and remuneration policy, human resources and stakeholders, risk management, and governance structure (OECD, 2004). While few points of the required disclosure (related party and risk management) are covered by accounting standards, most of these points highlight the importance of voluntary disclosure.

Corporate governance rating systems, such as the Standard and Poor's corporate governance rating, include transparency and disclosure as a key element in their rating systems. It is commonly agreed that poor levels of corporate disclosure and lack of transparency were the key reason of financial scandals around the world. Moreov er disclosure and transparency are the challenges facing the emerging capital markets and represent the key barriers of economic development (See: Berardino, 2001, CIPE, 2003, Gul and Leung, 2004).

Dunstan (2003) shows four drivers of high quality, transparent and comparable financial reports: reporting standards, corporate governance, external auditing, and enforcement. He points out that all four aspects must operate together to ensure that high quality, transparent and comparable financial reports are prepared. The first component, financial reporting standards, r epresent the codification of financial accounting practices that entities are required to comply with. The second is corporate governance mechanisms that provide the internal control system ensuring that the entity discharges its responsibilities under the applicable laws and regulations. The third is the external auditing process that represents the mechanism through which an independent assessment of the firm's compliance is attained. The final, and essential, mechanism is that of the regulators who enforce ultimate compliance with the applicable laws and regulations. It is essential that all four components of the infrastructure perform their respective roles for the quality of financial reporting to be ensured.

One implication of the increasing attention to corporate governance is the growing amount of academic research. Disclosure literature is one of the streams that has been extended to investigate the association between corporate governance attributes and the extent of disclosure. Recently, a number of disclosure studies examined the effect of a number of corporate governance characteristics on the level of disclosure in developed and developing countries. The next section reviews the relevant prior empirical studies. It starts with empirical studies that assess the extent of disclosure and use firm characteristics as main determinants of disclosure practice in developed and developing countries. Then it will move to review studies that address the relation between corporate governance characteristics and corporate disclosure. The prior disclosure studies in the Egyptian context are presented in a separate section.

2.4 Prior empirical studies assessing corporate disclosure and its determinants-using firm characteristics

Corporate compliance with the requirements of accounting standards has been addressed by a large number of prior studies that aimed to assess the level of compliance. The majority of these studies use firm characteristics to explain the variations in the degree of compliance. While some previous studies concentrate on compliance with both measurement and disclosure requirements (e.g. Street and Gray 2002; Taplin et al 2002; Samaha and Stapleton, 2008) other studies focus only on the compliance with disclosure requirements (e.g. Cooke 1989; Abd-Elsalam and Weetman 2003). In addition, some prior studies adopt a cross country approach (e.g. Barrett 1975; Barrett 1976; and Meek et al 1995) while others follow an intra country approach (e.g. Firth; 1980; McNally et al 1982; Hossain et al 1994; Aljifri 2008). With regard to disclosure literature, several studies focus only on the compliance with regulatory (mandatory) disclosure requirements (e.g. Tai et al., 1990; Owusu-Ansah 1998; Chen and Jaggi 2000; Abd-Elsalam and Weetman 2007), while a number of disclosure studies focus on voluntary disclosure (e.g. Chow and Wong-Boren 1987; Raffournier 1995; Haniffa and Cooke 2002; Barako et al 2006). However, aggregated disclosure, mandatory and voluntary, has been examined in some studies (e.g. Abayo et al. 1993; Ahmed 1996; Marston and Robson, 1997).

A number of previous voluntary disclosure studies have focused on a specific type of information. Examples of such studies include Adhikari and Duru (2006) who address the voluntary disclosure of free cash flow information in the 10-K and 10-Q reports of samples from the US, and Watson et al (2002) who address the disclosure of accounting ratios.

The following sections review some prior disclosure studies. Section 2.4.1 reviews previous studies that focus on total voluntary disclosure while section 2.4.2 summarizes prior studies that address the categories of total voluntary disclosure.

2.4.1 Empirical studies on total voluntary disclosure

Voluntary disclosure has been examined in a large number of empirical studies in disclosure literature. The main point is to assess the extent of total voluntary disclosure and to examine empirically its relationship with some firm characteristics that may explain its variation among investigated companies. This section presents the selected studies in developed and developing countries.

2.4.1.1 Prior studies in developed countries

In the United Kingdom, Firth (1979a) addresses the association between the extent of voluntary financial disclosure in the annual reports of 180 companies for the year 1976 and three firm characteristics: firm size, listing status and auditor type. The author uses weighted disclosure index containing 48 information items. Univariate analysis was employed. The firm size and listing status were found to be positively associated with the level of voluntary disclosure. The results indicate that the audit firm is not associated significantly with voluntary disclosure.

In another study, Firth (1980) examines the extent of the changes in voluntary disclosure of companies at the time of raising finance. He uses six different samples of manufacturing firms in UK. The first was for firms with new issues (40 companies), the second was for small size firms with rights issues (60 companies) and the third was for large size firms with rights issues (37 companies). The remaining three groups were used as control groups which contain the same number of companies: 40, 60 and 37 respectively. A weighted and un-weighted disclosure index of 48 items was employed to measure the extent of voluntary disclosure. The study concludes that the levels of voluntary disclosure by smaller sized companies increase when raising new stock market finance, via new issues and right issues.

Using data from New Zealand, McNally et al. (1982) examine the association between voluntary disclosure and five firm characteristics: size, profitability, growth, audit firm and industry. The constructed index included 41 voluntary items were applied to 103 annual reports for the financial year ended during 1979. The study employs rank order correlations using Spearman and concludes that firm size is associated positively and significantly with voluntary disclosure while the other characteristics were found to be insignificant.

In the case of Sweden, Cooke (1989) uses data from 90 non-financial companies to examine corporate voluntary disclosure. He classifies the investigated companies into three groups according to their listing status: 38 unlisted, 33 single listed on the Swedish Stock Exchange (SSE), and 19 multiple listed. Using a disclosure checklist of 146 items, the study provides evidence that the level of disclosure in the annual reports of the year 1985 differs significantly among the three groups. The regression analysis indicates that listing status and firm size are positively associated with voluntary disclosure. The results suggest that trading companies disclose information less than companies in manufacturing and service sectors.

In 1991, Cooke condu cted a similar study with the annual reports of some Japanese companies for the year 1988. He used the same criterion to classify the sample, 48 companies, into three groups: 13 unlisted, 25 listed on the Tokyo Stock Exchange (TSE) and 10 multiple listed. Cooke (1991) examined the relationship between the extent of voluntary disclosure and particular firm characteristics: firm size, listing status and industry type. The study employs stepwise regression and concluded that firm size is the best explanatory variable followed by listing status. Unlike Swedish manufacturing companies, Japanese manufacturing companies were found to disclose more information voluntarily than trading and services companies.

Focusing on an industry specific disclosure decision, Craswell and Taylor (1992) address the decision of Australian oil and gas companies to disclose information in their annual reports about estimated reserves. Using data from 86 companies working in the oil and gas sector, the study applies univariate and multivariate analysis, the Probit model. Because the study focuses on the specific item of disclosure, there is no checklist. The dichotomous approach was used for this decision. The results indicate that the audit firm is associated positively with the disclosure decision, while there is weak support for the effect of each of leverage, firm size, cash flow risk, and the proportion of shares held by the top 20 shareholders, on the disclosure decision.

In Switzerland, Raffournier (1995) uses a disclosure index of 30 voluntary items to investigate voluntary financial disclosure by Swiss listed companies. The disclosure items were derived from the Fourth and Seventh EU directives. Using the annual reports of 161 listed companies for the year 1991, the study examines the relation between voluntary disclosure and some firm characteristics: size, leverage, profitability, audit firm, industry, fixed assets, internationality level, and ownership structure. Univariate analysis and stepwise regression used conclude that the firm size and internationality play a major role in the disclosure policy of firms. The interesting point in this study is the use of ownership diffusion as an explanatory variable of voluntary disclosure.

Using a sample of 55 non-financial companies listed on the New Zealand Stock Exchange (NZSE), Hossain et al. (1995) address voluntary disclosure in corporate annual reports and examine empirically the effect of five firm-specific characteristics (firm size, leverage, assets in place, type of auditors, and foreign listing status) on the total level of voluntary disclosure. Based on agency theory, the study developed its hypotheses. Hossain et al (1995) construct a checklist contains 95 information items and follow an un-weighted approach to measure the extent of voluntary disclosure, the dependent variable. As with the majority of disclosure studies they use OLS regression and conclude that firm size, leverage, and foreign listing status have significant association with the level of information voluntarily disclosed in the annual reports of investigated companies.

In France where the annual report was not mandatory, Depoers (2000) relies on agency theory and limitations imposed by information costs to conduct a cost benefit analysis for the voluntary disclosure practices in corporate annual reports. The study investigates the effect of some economic determinants on the extent of voluntary disclosure in the annual reports of 102 listed companies on the Paris Stock Exchange for the year 1995. The author uses checklist of 65 information items and follows an un-weighted approach to measure the extent of voluntary disclosure. The economic determinants examined include firm size, foreign activity, ownership structure, leverage, auditor size, proprietary costs related to competition, and labour pressure. The results of multiple regression based on stepwise procedure indicate that firm size, foreign activity and proprietary costs have significant association with the extent of voluntary disclosure. Depoers recommends future research to investigate the interaction between voluntary disclosure and other non-financial agency cost determinants such as corporate governance mechanisms.

Firm characteristics as drivers of corporate disclosure are still the focus of great attention. Gruning (2007) points out that analyzing the entire network of causal relations is necessary in order to study the drivers of corporate disclosure. He argues that the driving factors do not have singular impacts on disclosure only but are interrelated. Using sixty annual reports from Germany and Poland, Gruning a employs structural equation model to investigate interrelations between four firm characteristics as drivers of corporate disclosure: firm size, cross listing, industry, and home country. The results of this study show that the four characteristics are interrelated factors that affect corporate disclosure quality. The firm size was found to have only an indirect effect on corporate disclosure. In other words, firm size does not directly influence disclosure practice but that is mediated by cross listing. Listing status was found to be the key element in understanding the network of related drivers of corporate disclosure. Although Gruning (2007) highlights the importance of the interrelation between the determinants of disclosure practice, the study focuses only on four firm characteristics and ignores other determinants such as corporate governance rules.

2.4.1.2 Prior studies in developing countries

Chow & Wong-Boren (1987) address the extent of voluntary financial disclosure practices in the annual reports of Mexican companies. They examine the association between three firm characteristics: firm size, financial leverage and assets in place; and the level of voluntary disclosure. They measure voluntary disclosure by developing a checklist containing 24 information items and employ both approaches of disclosure index: weighted and un-weighted. Their sample consists of the annual reports of 52 Mexican Stock Exchange listed firms for the year 1982. The results indicate that voluntary disclosure varies widely among the investigated companies. The results of multiple regression indicate that firm size has positive significant association with the voluntary disclosure scores, while gearing and assets in place were found to be insignificant variables. The interesting point with this study is the evidence of significant positive correlation between weighted and un-weighted scores. Such evidence has been used by the supporters of un-weighted approach.

A number of disclosure studies address the relation between voluntary and mandatory disclosure. Abayo et al. (1993) assess the quality of financial disclosure in the annual reports of Tanzanian companies. They extend the attributes of disclosure quality to include four measures: compliance with mandatory disclosure requirements, voluntary disclosure, the type of the audit report, and timeliness in order to analyze the annual reports of 51 Tanzanian companies for the year 1990. Two disclosure indices have been constructed in this study, a mandatory index with 88 items and a voluntary index of 44 voluntary items according to user needs. Their findings indicate a poor quality of corporate disclosure, mandatory and voluntary. The researchers explained these findings by the combination of high compliance costs and the low non-compliance costs. In addition, the study reports evidence of a weak positive association between mandatory and voluntary disclosure. Moreover, they conclude a positive association between the type of audit opinion and the timeliness of the corporate annual reports.

In Malaysia, Hossain, et al. (1994) address the association between the extent of voluntary disclosure in corporate annual reports and some firm characteristics: firm size, ownership structure, gearing, assets-in place, audit firm, and foreign listing status. They develop a checklist of 78 information items and follow an un-weighted approach to measure the extent of voluntary disclosure in the annual reports of 67 non-financial listed companies for the year 1991 on the Kuala Lumpur Stock Exchange (KLSE). The findings of the study indicate that both firm size and ownership structure have significant association with the level of voluntary disclosure in corporate annual reports. However, audit firm and gearing were found to be significant variables in the univariate analysis.

In the case of Saudi Arabia, Al-Razeen and Karbhari (2004) address the interrelationship between the mandatory and voluntary disclosures in corporate annual reports. They classify information items into three types: 23 mandatory, 18 items voluntary closely related to mandatory, and 15 voluntary. Based on this classification, three disclosure scores were computed from a sample of 68 Saudi Arabian companies (55 listed and 13 unlisted) for the year 1996. The researchers employ Pearson's correlation coefficients and conclude that there is no clear pattern of relationships between mandatory disclosure and the different types of voluntary disclosure in the different industrial sectors. The authors highlight the lack of high coordination between the board of directors and the management in writing parts of the annual report.

Alsaeed (2006) assesses the level of disclosure in the annual reports of non-financial Saudi companies and empirically investigates the impact of nine firm characteristics: firm size, debt ratio, ownership dispersion, company age, profit margin, return on equity, liquidity, industry type, and audit firm-on the extent of voluntary disclosure. He uses a checklist of 20 information items and follows the un-weighted approach to measure the extent of voluntary disclosure in the annual reports of 40 companies for the year 2003. Multiple linear regression analysis unranked OLS has been used and the results indicate that firm size is the only variable that has significant positive association with the level of voluntary disclosure while the remaining variables are insignificant in explaining the variation of voluntary disclosure in annual reports of Saudi firms.

Aljifri (2008) examines corporate disclosure in the annual reports of financial and non-financial companies in the United Arab Emirates (UAE). Using a sample of 31 companies and an index of 73 information items, the study concludes that the extent of disclosure in the UAE has significant association with the sector type (banks, insurance, industrial, and service). Banks were found to disclose more than the other sectors. He indicates that the reason is the significant role of the Central Bank's increasingly strict control of financial institutions. Weak legal and institutional enforcement were suggested as reasons for the insignificant difference in disclosures among the other sectors. Moreover, the study suggests that the extent of disclosure in the UAE is driven more by regulations than by the market since the size, gearing, and profitability, were found to have insignificant association with level of disclosure. The study employs logistic regression (WLS).

2.4.1.3 Discussion

Concerning the determinants of disclosure level, the results assessing the impact of various firm characteristics on corporate annual report disclosures are mixed and provide inconclusive evidence both in developed and developing countries. These characteristics include size, listing status, leverage, profitability, industry, gearing, and type of audit firm. Firm size and listing status are the most significant determinants of the level of disclosure in corporate annual reports of developed and developing countries. The majority of prior disclosure studies provide evidence of significant positive association between the extent of disclosure and firm size. However, a limited number of studies report that firm size is not related to the extent of disclosure (e.g. Malone et al., 1993; Ahmed, 1996 and Aljifri 2008). On the other hand the disclosure literature reports mixed results concerning the significance and direction of association between the extent of disclosure and other examined variables in both developed and developing countries.

Marston and Shrives (1995) reviewed the development and use of explanatory models in 32 disclosure studies and found that the results for studies that attempted to link disclosure levels to leverage, profitability and audit firm were inconsistent. In this regard, Wallace et al. (1994) indicate that this inconsistency may be realistic, they stated that:

> *"The changing features of prior studies, such as the number of firms included in the sample, the type and number of firm characteristics examined, the number of information items that formed the basis of the set of disclosure indexes as dependent variable, the different statistical methodologies used to analyze the data and the different settings (i.e., countries) of the study, have jointly or severally contributed to the mixed results from these studies. As a result, an investigation, in other settings, of corporate characteristics that correlate with the extent of disclosure seems justified" (P.43).*

A number of reviewed studies address both the mandatory and voluntary disclosure in corporate annual reports. In this regard Kanto and Schadewitz (1997) indicate that while disclosure literature provides plenty of evidence on the determinants of disclosure in accounting reports, relatively few studies have focused on the differences between the determinants of mandatory and voluntary disclosures

Although disclosure changes over time, most of previous disclosure studies examine disclosure at one point in time (e.g. Cooke, 1989; Tai et al., 1990; Ahmed and Nicholls, 1994; Hossain et al., 1994 and 1995; Haniffa and Cooke, 2002, Ghazali and Weetman 2006). Therefore, suffering from bias may be one of the criticisms that face the results of these studies (Hossain et al. 1994).

A limited number of disclosure studies examine the extent of disclosure over a period of time (e.g., Marston and Robson, 1997; Watson et al 2002; Abd-Elsalam and Weetman, 2003). However, most of these few studies select only two points of time, the first year and the last year of the study period. The reason may be the availability of data (Marston and Robson, 1997). These studies address the effect of specific changes in the business environment such as new regulations. However, adopting a longitudinal approach covering several years, study of the same companies may provide more explanations and a clearer view about the trend of disclosure practice employed by companies. Marston and Robson (1997) indicate that our understanding of disclosure decisions will be enhanced by studying disclosure practice over time. Haniffa (1999) argued that the extent of disclosure may not necessarily increase (especially for voluntary disclosure) unless some specific events such as the introduction of new standards occur which in turn may force companies to increase disclosure. The current study aims to investigate how the voluntary disclosure practices evolve over a period of time in the Egyptian context.

Disclosure literature employs several theories as guidance in explaining disclosure practices. Agency theory is frequently employed either alone or in conjunction with other theories (Marston and Robson, 1997). However, many authors criticize the use of agency theory especially with corporate governance and where a variety of stakeholders exist (see chapter four). Nevertheless no one theory can fully explain disclosure practices and a number of authors suggest that more work is needed to understand disclosure practices (Hopwood 2000; Healy and Palepu, 2001; Verrecchia, 2001). Haniffa (1999) indicates that disclosure theories seem fuzzy in the sense that all of them are logical and acceptable and none could be voted as the best theory of disclosure. Chapter four reviews the most common theories in the disclosure literature. It classifies these theories into five categories: regulatory approach, economic approach (agency, signaling, and capital need theory), political economic approach (legitimacy, stakeholder, and political costs theory), socio-economic approach (institutional theory), and cost-benefit approach (disclosure costs, litigation costs, proprietary costs, and disclosure benefits). Identifying the relevant theory depends on the emphasis of the study. Clearly there is overlap between these theories. While some of these theories complement each other, such as legitimacy theory and political theory, other theories seem to be competing, such as signaling and proprietary costs theory.

However, reviewing these theories indicates that each theory considers disclosure from different perspectives. While the economic approach focuses on parties related closely with economic activities and assumes that individuals are motivated by economic self interest only, the political economic approach focuses on those parties in addition to governmental agencies and assumes that people are motivated by power and economic self interest. Regarding the socio-economic approach, it assumes that people are motivated by societal values so it considers all parties inside and outside the company. Nevertheless, there is an overlap between the regulatory and cost benefit analysis approach on the one side and other approaches on the other. However, it must be emphasized that choosing a theory doesn't mean that it has some absolute superiority over other theories but it means that it is suitable for the purpose of this research. In this regard, there is an urgent need to recognize the effects of cultural on corporate governance and disclosure. So it can be argued that there is a need for more research about disclosure and corporate governance using theories such as stakeholder and new institutional sociology.

Methodologically, it is noteworthy that the majority of reviewed studies employ a self constructed checklist and follow the un-weighted approach to measure the extent of disclosure. However, the number of information items varies widely among the reviewed studies. Moreover, the majority of studies use OLS regression to examine the explanatory power of the suggested determinants. However, caution must be taken in employing OLS in disclosure studies since a number of its assumptions must be satisfied at first, otherwise the results will be unreliable (Cooke, 1998). Regression diagnostic will be done and presented in chapter eight of the current study.

2.4.2 Empirical studies on voluntary disclosure categories

It has been argued that analyzing the various sub-sections of disclosure provides an opportunity to offer deeper insights into associations with different determinants of this disclosure and to provide more specific theoretical explanations (Abd-Elsalam and Weetman, 2007). Recently a number of disclosure studies have focused not only on total voluntary disclosure but also on the categories of voluntary disclosure. These studies follow Meek et al (1995) who classify total voluntary disclosure into three categories according to the type of information: strategic, non financial, and financial information. This section reviews prior empirical studies that address voluntary disclosure practice by type of information.

Meek et al (1995) point out that existing empirical and theoretical literature have tended to treat voluntary disclosures somewhat generically. They provide evidence of clear differences across types of information as well as across countries. Using data from different developed countries, Meek et al. (1995) examine factors influencing voluntary disclosure practice in corporate annual reports. They address the association between voluntary disclosure and some firm characteristics: size, leverage, multi-nationality, profitability, country, industry type, and listing status. A self constructed checklist containing 85 items was used to measure the level of voluntary disclosure in the annual reports for the year 1989 of 226 multinational companies from the US (116), UK (64), France (16), Germany (12) and The Netherland (18). The study follows an un-weighted approach to score the voluntary disclosure. The main feature in this study is classifying the voluntary disclosure items, according to the type of information, into three main groups: strategic, non financial and financial items. The results provide evidence that different variables can be used to explain different types of voluntary disclosure. For example, firm size was found to be a significant variable with total voluntary disclosure, financial, and non financial information. But it was found to be insignificant with strategic information. Also, listing status was important in explaining voluntary strategic and financial information but was not significantly associated with non-financial information.

This study sheds light on the importance of analyzing voluntary disclosure by the type of information. Such analysis of disclosure practice provides a great opportunity to regulators and interested parties to gain more understanding of the motivations and determinants of voluntary disclosure practices. This opportunity may be more important in the case of emerging capital markets which seek more transparency.

Meek et al (1995) recommend recognizing the importance of this refinement of the analysis of voluntary disclosure behavior. They state (p.562) that:

> "*One reason for doing this is that the decision relevance of information probably varies by type. For example, the strategic and financial information categories have obvious decision relevance for investors. The non financial information category is directed more toward a company's social accountability, extending beyond the investor group to include other company stakeholders as well. As a result, the variables affecting voluntary disclosure choices may also vary by information type*".

In Hong Kong, Ferguson et al. (2002) follow the model developed by Meek et al (1995) to examine the level of voluntary disclosure practice of stated owned enterprises listed on the stock exchange. The researchers examine the impact of international capital market pressure on the voluntary disclosure of three types of information; strategic, financial and non financial, in the annual reports of formerly wholly state-owned enterprises listed in Hong Kong. They employ a cost benefit framework to develop the hypotheses and use a disclosure checklist consisting of 93 un-weighted information items classified into the three main groups. Their sample includes the annual reports of 142 non financial companies for the year 1995/1996. The study examines the effects of firm size, leverage, industry type, listing status, and firm type (local, H-share, Red Chip) on the extent of total voluntary disclosure in each of the three categories. The findings of regression analysis indicate that firm size is a significant variable with the total voluntary disclosure in each of the three categories. However, the authors provide evidence from the Hong Kong Stock Exchange that the level of disclosure by type of information varies considerably. This evidence is consistent with the evidence from developed countries provided by Meek et al (1995). Moreover, the study concludes that formerly wholly state-owned enterprises disclose significantly more strategic and more financial information than other listed companies.

Following the classification of Meek et al (1995), Chau and Gray (2002) address voluntary disclose practices in corporate annual reports. They examine the association between ownership structure (outsider ownership and family or concentrated ownership) and the extent of voluntary disclosure in the annual reports of manufacturing companies in two Asian countries, Hong Kong and Singapore. They consider that the percentage of shares owned by outsiders is the proportion of shares not held by insiders, namely directors and dominant shareholders. Agency theory has been employed to develop their hypotheses.

Using a disclosure index of 113 voluntary disclosure items - based on Meek et al (1995) – and following an un-weighted approach, they examine 122 annual reports for the year 1997 (60 from Hong Kong and 62 from Singapore). In the regression model, firm size, leverage, auditor type, profitability and multinationality have been added as control variables. The researchers conclude that there is a positive association between wider ownership and the extent of voluntary disclosure in both countries. In addition they indicate that the strong prevalence of insider and family controlled companies in Hong Kong is likely to be associated with lower levels of disclosure.

In Greece, Leventis and Weetman (2004) address voluntary disclosure practices in corporate annual reports. They highlight the need to subdivide aspects of voluntary disclosure and follow the approach of Meek et al (1995) to develop a self constructed checklist of 72 information items. However, they use different labels for their categories: corporate environment, social responsibility and financial information. Contrary to Meek et al (1995) who classify information about directors as a non financial item, Leventis and Weetman (2004) consider this item as strategic. Their sample consists of 87 annual reports of non financial publicly traded companies listed on the Athens Stock Exchange for the year 1997. To score the voluntary disclosure an un-weighted approach has been employed. Ranked regression has been applied to test the hypotheses related to seven firm characteristics: firm size, gearing, profitability, liquidity, industry type, share return and listing status. The findings show that the extent of voluntary disclosure in Greece is relatively low (37.57%). Firm size was the only variable that was found to be significantly associated with total voluntary disclosure and with each of the three categories. Gearing, profitability and liquidity were insignificant variables whether with overall disclosure or with any of the three categories. Other variables vary among the categories of voluntary disclosure.

In Malaysia, Ghazali and Weetman (2006) examine factors associated with voluntary disclosure in corporate annual reports. They follow the approach of Meek et al (1995) to develop a self constructed checklist to measure the level of voluntary disclosure in the annual reports of 87 non financial companies listed on the Kuala Lumpur Stock Exchange for the year 2001. Their checklist consists of 53 information items classified into three main categories: strategic, financial and corporate social responsibility. The researchers follow an un-weighted approach and employ stepwise regression. Unlike prior studies that use firm characteristics to explain voluntary disclosure and its categories, Ghazali and Weetman (2006) examine the effect of ownership structure, board characteristics and competitiveness. They assess firm size, profitability, gearing, and regulatory change. The study concludes that firm size, measured by the number of employees, and profitability have positive significant association with total voluntary disclosure and its categories except corporate social responsibility information. Director ownership was found to have significant negative association with total voluntary disclosure in each of the three categories.

Another study that benefits from disaggregating the checklist is the study of Aksu and Kosedag (2006) in Turkey. Based on the Standard & Poor's (S&P) methodology, the researchers address the transparency and disclosure practices of the 52 largest and most liquid firms in the Istanbul Stock Exchange (ISE). The 2003 annual report and corporate website have been examined for each of the 52 companies using a checklist consisting of 106 information items classified into three subcategories: ownership structure and investor relations, financial transparency and information disclosure, and board and management structures and processes. To explain the extent of voluntary disclosure, the study examined the relationship between voluntary disclosure and some firm-specific characteristics: profitability, leverage, market capitalization, and market-to-book ratio. The findings indicate that the annual reports and websites are weak in terms of voluntary disclosure. Firm size, profitability and market-to-book ratio were found to be significant variables that can explain the differences in the overall voluntary disclosure and each of the ownership structure and board and management categories, but not financial information. Also, the regression findings indicate that leverage is an insignificant variable with overall voluntary disclosure in the three subcategories.

Another study in Turkey, Agca and Onder (2007) addresses the voluntary disclosure practice in corporate annual reports. Following the same classification of Meek et al (1995), the researchers use a checklist consisting of 87 information items to assess the extent of voluntary disclosure and to identify which of the following factors affect voluntary disclosure: firm size, leverage, auditor type, ownership structure, profitability and multi-nationality. They analyze the annual reports for the year 2003 of 51 non financial companies listed on the Istanbul Stock Exchange (ISE). The results of OLS regression indicate that firm size, profitability and auditor type are significantly associated with total voluntary disclosure. The results also indicate different determinants to different categories of voluntary disclosure: firm size and profitability for strategic information, firm size and auditor type for financial information and leverage for non financial information.

In a recent study, Wang et al (2008) examine empirically the determinants and consequences of voluntary disclosure in the annual reports of Chinese listed companies. They use an un-weighted disclosure index of 79 discretionary items and follow the model of Meek et al (1995) to classify the checklist into three main groups: strategic, financial and non-financial. Of 109 companies that constitute their sample, there were very few numbers of firms that disclose non financial information. So they decided to omit the non-financial information. The results indicate that overall voluntary disclosure has a significant positive association with the proportion of state ownership, foreign ownership, firm performance (return on equity) and audit firm. The study finds that state and foreign ownership significantly affect strategic information while there is no evidence of such a relationship with financial information. Contrary to Ferguson et al (2002) who report that firm size is associated significantly and positively with overall disclosure and all types of disclosure, strategic, financial and non-financial information, Wang et al (2008) find firm size associated positively with overall and strategic information only. Moreover, leverage was found to be insignificant with all types of voluntary disclosure. Regarding the consequences, the study finds no relation between voluntary disclosure and cost of capital.

In Italy, Patelli and Prencipe (2007) address the relationship between voluntary disclosure and independent directors. They use a sample of 175 non-financial companies listed on the Milan Stock Exchange in 2002. A weighted checklist of 74 information items classified into six categories has been employed to measure the extent of voluntary disclosure. Unlike the previous studies, Patelli and Prencipe (2007) analyze voluntary disclosure practices and its determinants on the level of six categories in addition to total voluntary disclosure. The six categories are background information, summary of historical results, segment information, key non financial statistics, projected information, and management discussion and analysis. The findings of the study suggest that determinants of voluntary disclosure vary among the six categories. The independent directors were found to be significantly associated with total voluntary disclosure and with each of background information, key non financial statistics, and management discussion and analysis.

2.4.2.1 Discussion

All the studies reviewed have followed Meek et al (1995) and address total voluntary disclosure and its three categories. In this regard, it should be noted that the majority of these studies were in developing countries and adopt an intra country approach, while the study of Meek et al (1995) was in developed countries and adopts a cross countries approach.

Although all reviewed studies classify total voluntary disclosure into three main categories, there are different labels for these categories. For example, while Meek et al (1995) use strategic, financial and non financial information, Leventis and Weetman (2004) use corporate environment, social responsibility and financial information and Ghazali and Weetman (2006) use strategic, financial and corporate social responsibility.

Moreover, there is no agreement on the classification of some voluntary items. For example, while Meek et al (1995) consider information about directors as non financial information, Leventis and Weetman (2004) argue that this information is more closely related corporate strategy so they classify it as a strategic information into the corporate environment category. Also, the financial highlight statement was classified as financial information in Ghazali and Weetman (2006) but was classified as corporate environment, not financial information, in the study of Leventis and Weetman (2004). Furthermore, some items in the non financial category in Meek et al (1995) are financial information, such as amounts spent on training and the cost of safety measures. As such there is no clear criterion to classify information items. It depends on the research context and the researcher's choice.

However, all the reviewed studies in this section recognize the importance of analyzing the categories of voluntary disclosure. Such analysis may be more important in longitudinal studies that investigate the extent and trend of voluntary disclosure since it allows for closer investigation of the disclosure practices of the different categories of information. In this regard, analyzing the checklist on the level of all sub categories - as in Patelli and Prencipe (2007) - may be helpful in understanding the disclosure practices. The findings of such an analysis may have some important implications for interested parties in an emerging capital market especially in transitional economics. Once again the importance of this analysis increases in a longitudinal study.

In relation to the determinants of voluntary disclosure and its categories, it should be noted that firm size is the most significant variable when explaining total voluntary disclosure. However, there are mixed results concerning the relationship between firm size and each of the categories of voluntary disclosure. While Ferguson et al (2002) and Leventis and Weetman (2004) found firm size significantly associated with each of the three categories of voluntary disclosure, firm size could not explain the strategic information in Meek et al (1995) and also was insignificant with non financial information and corporate social responsibility, as in Chau and Gray (2002) and Ghazali and Weetman (2006) respectively. In addition, there are mixed results concerning the effect of other firm characteristics on the extent of voluntary disclosure categories. This issue also raises a question about the relevant theory that may be used to explain the variation in the extent of voluntary disclosure categories. The results support the call to look for and employ a comprehensive theoretical framework by combining some relevant disclosure theories. In this regard, chapter four will review the most common theories employed in disclosure literature to identify the relevant theoretical framework to the current study.

However, Meek et al (1995) indicate that additional factors other than firm characteristics may influence voluntary disclosure. More recently a number of disclosure studies have expanded to investigate the effect of corporate governance characteristics on the extent of voluntary disclosure. The following section provides an overview of these empirical studies.

2.5 Prior empirical studies assessing the relation between corporate disclosure and corporate governance

Recently, an increasing number of empirical studies have combined two streams of the literature, corporate disclosure and corporate governance. However, it was argued that prior disclosure research fails to explore corporate governance and cultural factors despite their importance (Haniffa and Cooke, 2002). A number of studies have examined the association between corporate governance characteristics and the level of disclosure in developed and developing countries. Reviewing the prior empirical studies on corporate governance and disclosure, studies are varied. While some studies focus on specific types of disclosure such as share option disclosure, Forker (1992), and corporate social responsibility, Haniffa and Cooke, (2005), others address the comprehensiveness of information in financial disclosure, Chen and Jaggi (2000).

However, the relationship between corporate governance and the extent of voluntary disclosure in corporate annual reports has been investigated by large number of disclosure studies around the world. Examples include Spain (Arcay and Vazquez 2005), Australia (Collett and Hrasky 2005), Hong Kong (Chen and Jaggi 2000, Ho and Wong 2001; Gul and Leung 2004), Malaysia (Haniffa and Cooke 2002; Ghazali and Weetman 2006), Singapore (Eng and Mak 2003; Cheng and Courtenay 2006), China (Huafang and Jianguo 2007), Kenya (Barako et al 2006), Ghana (Tsamenyi et al 2007), Taiwan (Guan et al 2007).

Moreover, disclosure of corporate governance information in corporate annual reports has been addressed by many researchers in developed countries (Anand, 2005). Examples include Bujaki and McConomy (2002) in Canada, Parum (2005) in Denmark, and Bauwhede and Willekens (2008) in the European Union. In addition Sheridan et al (2006) examine the relationship between issuing corporate governance codes and the disclosure of corporate news in the UK. The study provides evidence of an increasing flow of corporate news following the publication of corporate governance codes in the1990s. However, based on the request of the Inter-governmental Working Group of Experts on International Standards of Accounting and Reporting (ISAR) in 2004, a series of annual reviews that examine corporate governance disclosure practices around the world, especially developing countries, have been issued.

Corporate governance has been captured in disclosure literature by several variables or characteristics of the board of directors and its committees. Examples include board leadership and board composition (e.g. Haniffa and Cooke, 2002; Eng and Mak 2003); independent non-executive directors (e.g. Chen and Jaggi, 2000); and audit committee (e.g. Ho and Wong 2001; Carcello and Neal 2003; and Barako et al 2006). Although ownership structure has been examined as an explanatory variable of disclosure level in prior disclosure studies (e.g. Raffournier, 1995 in Switzerland and Depoers, 2000 in France), the increasing attention to corporate governance has added to its importance. Several types of ownership have been addressed, such as managerial ownership (Yuan and Xiao 2007 and Guan et al 2007), institutional ownership (Haniffa and Cooke 2002), outside ownership (Chen and Jaggi 2000), governmental ownership (Naser et al. 2002), and block-holder ownership (Eng and Mak 2003). However, the evidence from prior studies is mixed. Table 2-2 summarizes some empirical studies. The following paragraphs present an overview of the common attributes of corporate governance in disclosure studies.

Table 2.2 Studies addressing the relationship between corporate disclosure and corporate governance

Study	Country	Sample size	Checklist items	Independent variables	Results
Boesso and Kumar (2007)	Italy and USA	72 companies	Content analysis	Size,, industry membership, complexity, industry volatility, corporate governance structure, stakeholder engagement, intangible assets.	The emphasis on stakeholder management, relevance of intangible asset, market complexity and information needs affect the volume and the quality of voluntary disclosure.
Guan et al (2007)	Taiwan	45 listed company 2003	37 information item for the annual report and 20 item for the website information	Managerial ownership, block holder ownership, institutional ownership, directors ownership and outside directors	Block holders ownership associated negatively while institutional ownership and directors ownership associated positively with disclosure level.
Huafang and Jianguo (2007)	China	559 Listed companies, 2002	30 voluntary items, un-weighted	Role duality, independent director, foreign listing, block-holder ownership, managerial ownership, state ownership, legal person ownership.	Block-holder ownership, foreign listing ownership and independent directors associate positively with voluntary disclosure. While role duality is negatively associated wit voluntary disclosure.
Lim et al (2007)	Australia	181 companies	67 voluntary items	Ratio of independent directors to total board size.	Positive association between board composition and VD. Independent boards disclose more forward looking and strategic information.
Patelli and Prencipe (2007)	Italy	175 listed companies	74 items in six categories	Independent directors, ownership diffusion, firm size , profitability, leverage, and labor pressure.	Independent directors were found to be significantly associated with total voluntary disclosure, background information, key non financial statistics, and management discussion and analysis.

Tsamenyi et al. (2007)	Ghana	22 listed companies 2001-2002	36 information items	Ownership structure, dispersion of shareholding, firm size, and leverage.	Ownership structure and firm size associate significantly with Corporate disclosure. Leverage was found to be insignificant.
Yuan and Xiao (2007)	China	364 non financial companies	60 unweighted information items	Managerial ownership, competition degree.	With low degree of competition managerial ownership associated negatively with voluntary disclosure.
Barako et al (2006)	Kenya	43 listed companies 1992-2001	47 voluntary items Weighted scores	Board composition, Board leadership, Board size, Audit committee. Blockholder, foreign and institutional ownership.	Voluntary disclosure associated positively with audit committee, institutional and foreign ownership but negatively with the proportion of non-executives.
Cheng and Courtenay (2006)	Singapore	104 listed companies (2000)	72 voluntary items	Board size, role duality, independent directors and regulatory regime.	Board independence has positive association with voluntary disclosure while role duality and board size are insignificant.
Ghazali and Weetman (2006)	Malaysia	87 listed companies 2001	53 voluntary disclosure items unweighted	Ownership structure (shares owned by top 10 shareholders, number of shareholders, director ownership, and governmental ownership) Family members on the board, ratio of NED, role duality, market share, concentration ratio, firm size, profitability, gearing and regulatory change.	Director ownership and the proportion of family members on the board associated negatively with voluntary disclosure.

Gul and Leung (2004)	Hong Kong	385 firm observations	43 voluntary items	Board leadership, expert outsiders	Role duality is negatively associated with voluntary disclosures but this is moderated by the expertise of non-executives moderates the CEO duality/
Eng & Mak (2003)	Singapore	158 listed companies	46 weighted disclosure items	Industry, audit firm, size, outside directors, profitability, governmental ownership, leverage, analyst following, managerial ownership, and block ownership.	Size, leverage, outside directors, managerial ownership, and governmental ownership were found significant.
Haniffa & Cooke (2002)	Malaysia	138 listed companies	65 voluntary disclosure items	Ownership structure, asset in place, size, profitability, industry, role duality, family members, audit firm, listing status, cross directorships, qualification of directors, complexity.	There is significant positive association between disclosure and Size, profitability, assets in place, foreign investors, ownership by top ten shareholders, diversification. significant negative association with industry, independent chair, and family members on the board.
Ho & Wong (2001)	Hong Kong	98 listed companies	20 voluntary disclosure items	Family members, audit committee, independent directors, role duality, assets in place, leverage, industry, and size.	Family members, audit committee, size and industry were found significant.
Chen & Jaggi (2000)	Hong Kong	87 listed companies	30 weighted mandatory items	Size, liquidity, audit firm, independent directors, family company, gearing, outside ownership, profitability, sales, market capitalization.	Size, independent directors, profitability, non family, and conglomerate were significant.

2.5.1 Board Characteristics

It is commonly argued that the board of directors has a pivotal position in the structure of corporate governance. The directors are responsible for the governance of their companies and therefore they are not only agents of a company, as a natural person, but they are also its trustees (Crowther and Jatana, 2005).

Board leadership (Role duality) a large number of reviewed disclosure studies addresses the relationship between corporate disclosure and role duality. The majority of these studies are based on the perspective of agency theory. In other words, role duality may constrain board independence and impair the board's oversight and governance roles which include corporate disclosure policies. Forker (1992) indicates that separation of the roles of chair and CEO may enhance monitoring quality and improve reporting quality.

The Cadbury Committee Report (1992) recommends that large companies should separate the roles of CEO and chairman. In the US, Imhoff (2003) suggests that SEC must prohibit the CEO or any other past or current top manager of the corporation from acting as chairman of the board of directors, from being involved in any way in the nomination of directors, or from being responsible for setting the board's agenda and meeting requirements.

Gul and Leung (2004) examine the relation between role duality and voluntary disclosure in Hong Kong. Their study has been extended to address the effect of the expertise of non-executive directors on the relationship between role duality and voluntary disclosure. They control for managerial ownership and audit quality. The study indicates that there is a negative association between role duality and voluntary disclosure. However, the study pointed out that the expertise of non-executive directors moderates the negative association between role duality and voluntary disclosure. Gul and Leung (2004) argue that corporate boards with a higher proportion of expert non-executive directors are expected to be more effective in board monitoring and encouraging higher levels of corporate transparency. They measure the expertise of outside directors in terms of whether the independent non-executive directors hold outside directorships of other ''unconnected'' listed companies. In this regard, the idea of recognizing the qualifications of members on the board is valuable. However, it may be better to use proxies other than cross holding directorships to capture the qualifications of non-executive directors.

However, the evidence from prior disclosure studies is mixed. Role duality was found to have negative association with voluntary disclosure in Malaysia (Haniffa and Cooke, 2002) and Hong Kong (Gul and Leung, 2004). On the other hand, some studies conclude that role duality is not associated with the level of voluntary disclosure (Arcay and Vazquez, 2005 in Spain; Cheng and Courtenay, 2006 in Singapore; Ghazali and Weetman, 2006 in Malaysia).

Board composition (Non executive directors) Concerning financial reporting, outside directors may encourage firms to disclose more information to stakeholders especially investors. Outsider dominated boards are less likely to suffer from financial statement fraud and more likely to issue consistently earnings forecasts (Beasley, 1996; Ajinkya et al., 2003). Chen and Jaggi (2000) document a positive relationship between the proportion of independent non-executive directors and inclusiveness of financial disclosure. They point out that this relationship is weaker for family controlled firms.

The issue of independence of non executive directors has been addressed by Clifford and Evans (1997) in the Australian context. The researchers indicate that board composition can be represented by three types of directors; insiders, grey area and outsiders. Not all non executive directors are independent. The study found that 35% of non-executive directors in the investigated companies were involved in transactions with their companies (i.e. gray area directors) which potentially threaten their independence. As such, compliance with the requirement or recommendation of having a non executive majority on the board does not mean that the company will not be controlled by internal management.

In this regard Crowther and Jatana (2005) highlight the internecine nature of non executive appointments. They state that these people know each other as directors of the organization before they are appointed. Therefore their independence is subject to question. Moreover, non executive members who have sat on the same board for a long period of time are more likely to have established personal relationships with the managers (or the dominant shareholder) that they should monitor (Patelli and Prencipe 2007). However, this criticism is increasing in developing countries, such as Egypt, wher e there is no clear rule or criterion for choosing independent non executive directors.

In Italy, Patelli and Prencipe (2007) provide evidence of a positive relationship between the proportion of independent directors on the board (as an internal mechanism of control) and voluntary disclosure in corporate annual reports (as an external mechanism). To address the real independent directors they exclude from independent directors those who have cross directorships, i.e. members on the board of other companies, in addition to those who have been members of the same board for a long period of time.

Lim et al (2007) examine the association between board composition and voluntary disclosure in the annual reports of 181 Australian companies. They develop checklist of 67 voluntary items and follow the classification of Meek et al (1995): strategic, non financial, and financial information. The authors employ two stage least squares regression. In the first stage they estimate the relation between the ratio of independent directors to total board size and firm characteristics that may be related to voluntary disclosure. In the second stage they investigate the effect of board composition, captured by the fitted values from the first stage, on the extent of voluntary disclosure. Their results indicate a positive association between board composition and total voluntary disclosure. The study finds that independent boards disclose more forward looking and strategic information

Audit committee According to the best practice of corporate governance, an audit committee should be established in listed companies. The audit committee is a subset of the corporate board of directors and has the responsibility of enhancing internal control procedures, overseeing a firm's financial-reporting process, external reporting and risk management of companies. It also plays an important role by facilitating communication between the board, external auditors and internal auditors (Klein, 2002 and Chau and Leung, 2006). Capital market authorities around the world require listed companies to establish audit committees. It is commonly agreed that the audit committee has an important role to play in ensuring the quality of financial reporting (Felo et al, 2003). Due to the increasing awareness of the important role of audit committee, a number of companies voluntarily created an audit committee to provide more effective communication between the board of directors and external auditors (Rezaee 2002). However, the existence of an audit committee does not ensure effective monitoring of the corporate governance or enhancing the quality of financial reporting. A number of important points such as the experience of audit committee members, their power and independence should be considered to ensure the effectiveness of audit committee. In this regard incorporating non executive directors (outsider) into an audit committee is essential.

Generally there is a call for more research of the effectiveness of audit committee (Pucheta-Martínez and Fuentes, 2007)

Concerning disclosure literature, a number of studies examine the relationship between the audit committee and the extent of disclosure. For example, Ho and Wong (2001) provide empirical evidence of a positive relationship between corporate disclosure practices and the existence of an audit committee. Barako et al (2006) document evidence of the association between voluntary disclosure and the audit committee in Kenyan listed companies. However, information about audit committee is considered to be an integral items in any checklist developed to study corporate governance disclosure.

2.5.2 Ownership structure

The previous sections indicate that different aspects of ownership structure have been used as explanatory variable of disclosure practices. It may be worth indicating that prior studies have divided ownership structure into several categories such as institutional ownership (Haniffa and Cooke 2002), outside ownership (Chen and Jaggi 2000), Governmental ownership (Naser et al. 2002; Eng and Mak 2003), and block-holder ownership (Eng and Mak 2003; Huafang and Jianguo 2007). Generally, the evidence from most of these studies indicate that there is significant positive association between the extent of disclosure and each of governmental, foreign, and institutional ownership. On the other hand there is significant negative association with managerial ownership (Haniffa and Cooke 2002; Eng and Mak 2003).

The relationship between institutional ownership and disclosure has been examined in prior studies. El-Gazzar (1998) argues that large institutional ownership may encourage firms to disclose more information voluntarily. Schadewitz and Blevins (1998) address interim disclosures in Finnish firms and provide evidence of negative association between institutional ownership concentration and disclosure. McKinnon and Dalimunthe (1993) and Mitchell et al (1995) examine voluntary disclosure of segment information by Australian companies and conclude there is only weak support for the positive relation between ownership diffusion and disclosure.

Moreover, it is argued that managers in firms dominated by outside ownership will provide voluntary disclosure to reduce monitoring costs by outside shareholders. Ruland et al. (1990) assume that firms with a higher proportion of outside ownership release earnings forecasts more than others. Their results indicate that as inside ownership increases, firms are less likely to provide management forecasts of earnings.

Chau and Gray (2002) examine the association between ownership structure, outsider ownership and family or concentrated ownership, and corporate voluntary disclosure in the annual reports of industrial companies in two Asian countries, Hong Kong and Singapore. They consider that the percentage of shares owned by outsiders is the proportion of shares not held by insiders namely directors and dominant shareholders. They conclude that there is a positive association between wider ownership and the extent of voluntary disclosure in both countries. In addition they indicate that in Hong Kong the strong prevalence of insider and family controlled companies is likely to be associated with lower levels of disclosure.

Eng and Mak (2003) examine the impact of ownership structure and corporate governance on voluntary disclosure using a sample consisting of 158 firms listed on the Stock Exchange of Singapore at the end of 1995. The study uses managerial ownership (the proportion of ordinary shares held by the CEO and executive directors), block-holder ownership (the proportion of ordinary shares held by substantial shareholders), and government ownership to assess ownership structure. Board composition is assessed by the percentage of independent directors. Their sample consists of financial and non-financial firms.

Eng and Mak (2003) focus on voluntary disclosure of strategic, non-financial and financial information in the management discussion and analysis in the annual report. They use an aggregated disclosure score to measure the extent of voluntary disclosure. Results indicate that there is an association between voluntary disclosure and ownership structure and corporate governance. While lower managerial ownership and significant government ownership are associated with increased voluntary disclosure, different types of block-holder ownership (individuals, institutions/corporations and nominees) are not related to disclosure. Contrary to evidence from prior studies, the study provides evidence of a negative association between the proportion of outside directors and voluntary disclosure. Also, the study concludes that there is a negative association between debt and voluntary disclosure. The authors point out that this is consistent with debt being a mechanism for controlling the free cash flow problem, so reducing the need for disclosure.

Ghazali and Weetman (2006) address the relationship between ownership and voluntary disclosure in the annual reports of Malaysian companies. They outline several aspects of ownership, ownership concentration (the 10 largest shareholders), number of shareholders, director ownership and governmental ownership. They conclude that director ownership is significantly negatively associated with the extent of voluntary disclosure. On the other hand they report that other aspects of ownership are found to have insignificant association with the extent of voluntary disclosure.

Using a sample of 45 listed firms in Taiwan in a single industry, Guan et al (2007) address the relationship between disclosure level and some variables of ownership structure and board characteristics, namely managerial ownership, block-holder ownership, institutional ownership, director ownership and outside directors. They employ a checklist of 37 items for annual reports and 20 items for websites to measure the extent of disclosure. They document evidence of negative association of block-holder ownership with the aggregate disclosure, while institutional ownership and director ownership were found to be positively associated with disclosure levels. The outside director factor was found to be insignificant. Guan et al (2007) use a checklist of 57 items: 37 item for annual reports and 20 items for the website. They evaluate each item by two researchers independently with a score range of 0 to 5 and to reduce the subjectivity they use the average of the two researchers` scores.

Based on agency theory and proprietary costs, Yuan and Xiao (2007) investigate the joint effect of managerial ownership and the degree of competition in the product market on the extent of voluntary disclosure in China. Their findings indicate that managerial ownership associated negatively with the extent of voluntary disclosure when the degree of competition is low.

2.5.3 Discussion

It is expected that the increasing attention paid to corporate governance issues will be maintained into the future and that corporate governance issues will grow over time in importance (Solomon 2007). Because of a wide variety of corporate governance interpretations, there is an urgent need for a clear definition to corporate governance and its components, especially for developing countries that have different cultures and emerging capital markets. In this regard it may be acceptable to use the broad definition. However, the successful application of corporate governance in emerging capital markets or developing countries needs to take into consideration the nature of different mechanisms and institutions, either on the macro or micro level, that govern the behavior of managers as an agent.

In addition there is a need to use other theories beside agency theory to study the relation between corporate governance and disclosure. Developing countries have some specific features that must be taken into consideration. For example a large number of companies in developing countries are family controlled. Ho and Wong (2001), and Haniffa and Cooke (2002) provide evidence of a significant negative association between voluntary disclosure and the proportion of family members on the board. Culture factors may help in understanding corporate governance and disclosure practices. In addition to unfamiliarity with corporate governance and audit committee in developing countries, there are dominant board characteristics; such as role duality and board composition; that may affect the applicability of corporate governance.

Although there is increasing attention to corporate governance around the world especially in emerging capital markets, most prior studies were in Asian countries. There is a lack of empirical studies concerning the relationship between corporate governance and corporate disclosure in the Middle East and North Africa countries (MENA).

Most prior studies use a single point of time, one year; it may be helpful to address the impact of corporate governance on disclosure over several years, especially in emerging capital markets such as Egypt, to understand how it evolves over time. The following section summarizes the prior disclosure studies in the Egyptian context.

2.6 Prior disclosure studies in the Egyptian context

Although the increasing attention to transparency and corporate governance in Egypt as an emerging capital market, the international published research on disclosure practice of Egyptian listed companies is limited. However, a number of studies address disclosure practices in the Egyptian context. This section reviews previous disclosure studies in the Egyptian capital market in order to identify the gap that this current study aims to fill. While most of these studies focus on mandatory disclosure (Dahawy et al 2002; Abd-Elsalam and Weetman 2003; Abd-Elsalam and Weetman 2007), Hassan et al (2006) address the mandatory and voluntary disclosure practices. Samaha and Stapleton (2008) examine the extent of compliance with measurement and disclosure requirements. More recently Rizk et al (2008) investigate one type of voluntary disclosure, corporate social responsibility.

Dahawy et al (2002) highlight the conflict between IAS disclosure requirements and the secretive culture in Egypt. They carried out an in-depth analysis of the financial statements of three newly privatized Egyptian companies, two years prior to privatization and one year after. The three companies operate in one sector, infrastructure sector. In addition, the authors consider five international accounting standards, No.1, 5, 8, 21, and 25. The results indicate that the extent of disclosure in the annual reports is considerably lower than the IAS's requirements. Based on Hofstede's model (1984) and Gray's model (1988), The study points out that Egyptian culture is characterized by statutory control; uniformity; secrecy; and conservatism. The study concludes that Egyptian culture and socio-economic factors had a significant effect on the implementation of IASs.

However, the study focuses on three privatized companies in one sector only, which raises a question about the generalization of the results to the private sector and the Egyptian market as a whole. Moreover, the period after privatization, one year, may not be enough to conclude that the non-compliance is due to cultural values. The efficient application may be a function of other factors such as enforcement, accounting knowledge of the preparers and auditors, and the familiarity with new requirements.

Abd-Elsalam and Weetman (2003) address the effect of relative familiarity and language accessibility on the extent of mandatory disclosures in the annual reports of listed non financial companies in Egypt when IASs were first introduced. They use sample of 72 companies for the year 1995/1996. Consistent with the results from other developing countries, e.g. Wallace, 1987; Tai et al 1990; Nicholls and Ahmed, 1995, the study indicates a lack of full compliance. Interestingly, the study concludes that the relative familiarity and language barriers have had an impact on corporate disclosure practice. However, the study focused only on mandatory disclosure not voluntary disclosure. In addition it focused on one point of time, the first year of IAS's application. Nevertheless, the results of this study raise questions about the effect of familiarity on each of corporate governance, as a new concept, and voluntary disclosure practices in emerging capital markets.

Hassan et al (2006) investigate disclosure practice and its determinants by non-financial listed companies over the period 1995 to 2002 in the Egyptian Stock Exchange. Using an un-weighted disclosure index, the study addresses mandatory and voluntary disclosure. The study indicates that disclosure level has increased gradually over the period of study. It is the first study that examines the extent of voluntary disclosure of listed Egyptian companies. The study considers mandatory items of information that show volatility in disclosure over time to be voluntary disclosure. It uses a compliance ratio 78% as the cut point. As such, the voluntary disclosure index used in this study is based on mandatory items with low compliance ratio and voluntary items of information. However, the low compliance ratio of a mandatory item does not change the compulsory nature of this item. Such cases of non compliance with mandatory rules may be considered as a form of voluntary compliance not voluntary disclosure (Wallace and Naser, 1995). A voluntary disclosure index based on such a procedure may explain the high voluntary disclosure score (48%) compared with other studies in emerging capital markets, such as 28% and 31.3% in the Saudi and Malaysian stock exchanges (Naser and Nuseibeh, 2003 and Haniffa and Cooke, 2002).

Abd-Elsalam and Weetman (2007) address the mandatory disclosure practices in a period of complex changes. They use annual reports of non financial listed companies in Egypt for the years 1991/92 (20 companies) and 1995/96 (72 companies) to examine the effect of the complex regulatory changes occurring in Egypt in the first of 1990s especially issuing the new capital market law in 1992. They use a checklist of 241 financial and non financial mandatory items to measure the level of compliance with disclosure requirements. The study classified the checklist items by the type of regulation mandating the disclosure and by the location of items in the annual reports. The authors conclude that when introducing new regulations a case of non full compliance is likely to occur. They find that the primary problems lie in the aspects related to new regulation due to unfamiliarity.

However, samples used in this study may be not representative especially for the year 1991/92. On the other hand the authors highlight the importance of tailoring and analyzing the sub sections of a disclosure checklist. They argue that research design should not be excessively constrained by a desire only for replication and comparability with prior work, especially when exploring issues specific to emerging markets.

Using a disclosure checklist generated by the CMA and the financial statements for the year 2004 of actively traded companies, Dahawy and Conover (2007) investigate accounting disclosure in companies listed on the Egyptian stock exchange. Their sample was 15 companies. They find that the average of disclosure score was 61% and they explain the non compliance by cultural reasons.

However, this study use CMA's checklist that contains a limited number of items. This checklist does not include the disclosure requirements of IAS's that are mandated in Egypt over the examined period. Moreover, the sample is too small and therefore it may be difficult to generalize the results of the study. The study is an analysis of the disclosure of the financial statements without an attempt to explain the variations of disclosure by some explanatory variables such as firm characteristics and corporate governance rules.

Using the annual reports of 281 non financial companies for the year 2000, Samaha and Stapleton (2008) address the level of compliance with the disclosure and measurement requirements of Egyptian listed companies. The study developed a checklist of disclosure and measurement based on a number of checklists developed by big audit firms and those used in previous studies. Based on un-weighted indices, the study concludes that the overall compliance is 50% for disclosure indices and 56% for measurement/presentation indices.

Samaha and Stapleton (2008) noticed that the compliance level in some companies is high especially when trading is active. They indicate also that some companies are prepared to make voluntary disclosures to fall in line with IAS, even when this is not required by local regulations. However, the study did not consider firm characteristics, such as firm size and cross listing, or corporate governance characteristics that might explain the variations in the extent of compliance.

In a recent study, Rizk et al (2008) use a sample of 60 Egyptian manufacturing companies to address the social and environmental reporting practices in the corporate annual report for the financial year 2002. They employ an un-weighted disclosure index consisting of 34 information items. The study concludes that the extent of corporate social responsibility is low. In addition, the nature of disclosures was found to be overwhelmingly descriptive. Their findings indicate that industry membership is a statistically significant factor in relation to the category of disclosure. In addition, Rizk et al (2008) found that government owned companies disclose more employee related information than private companies. On the other hand private companies were found to disclose customer related, environment related, and community related information more than governmental owned companies. Legitimacy theory was used in this study to explain these results. The authors argued that increased environmental disclosure by private companies is a strategy employed by Egyptian organizations to ensure/maintain their organizational legitimacy and perhaps even to prevent additional regulations.

However, the study of Rizk et al (2008) is considered to be the first exploratory study of corporate social responsibility reporting in the Egyptian context. While the study addresses the effect of industry membership the sample did not include all sectors. It focuses on the legal form of the company not the ownership percentages. In addition the study did not attempt to explain the variations of such type of disclosure by some explanatory variables such as firm characteristics and corporate governance rules.

2.7 Conclusion: the Gap in the literature

Based on the above discussion, the following points can be identified:

While there are a large number of disclosure studies that assess the extent of voluntary disclosure in corporate annual reports, the majority of these studies concern developed countries and Asian countries. There is lack of voluntary disclosure studies in the Middle East and North Africa countries (MENA).

The majority of disclosure studies cover a single point of time, i.e. one year only. Other studies address disclosure over two points of time in order to assess the extent of disclosure. However, a longitudinal study on a yearly basis that can trace disclosure practices over a number of years may help to provide more explanation as to how disclosure practices evolve over time. In addition, it will help trace the trends of disclosure and the impact of culture and corporate governance against the backdrop of social and economic development in the country (Haniffa and Cooke, 2005).

Although there is increasing number of disclosure studies that follow the approach of Meek et al (1995), there is no clear criterion for the classification of categories or the items under each category. However, extending the approach of Meek et al (1995), by narrowing the categories and by using more than the three categories, ma y help to explain the disclosure practices and to provide a better understanding of the needs of several stakeholders. Such extension is more important in the case of emerging capital markets that seek to enhance market transparency.

Although there are an increasing number of disclosure studies concerning the Egyptian capital market there is no study which investigates the extent of voluntary disclosure and its categories. In addition, none of the prior disclosure studies in the Egyptian context examine the effect of corporate governance characteristics on the extent of disclosure.

The current study tries to contribute to disclosure literature and corporate governance literature through examining the voluntary disclosure practices in corporate annual reports of Egyptian listed companies. The study is intended to cover four years that witnessed increasing awareness of corporate governance and transparency in addition to some initiatives such as establishing the Egyptian institute of directors and issuing the Egyptian code of corporate governance. The rationale for using the Egyptian capital market and the main changes over this period will be outlined in the next chapter that provides an overview of the Egyptian environment.

Chapter Three: The Egyptian Context

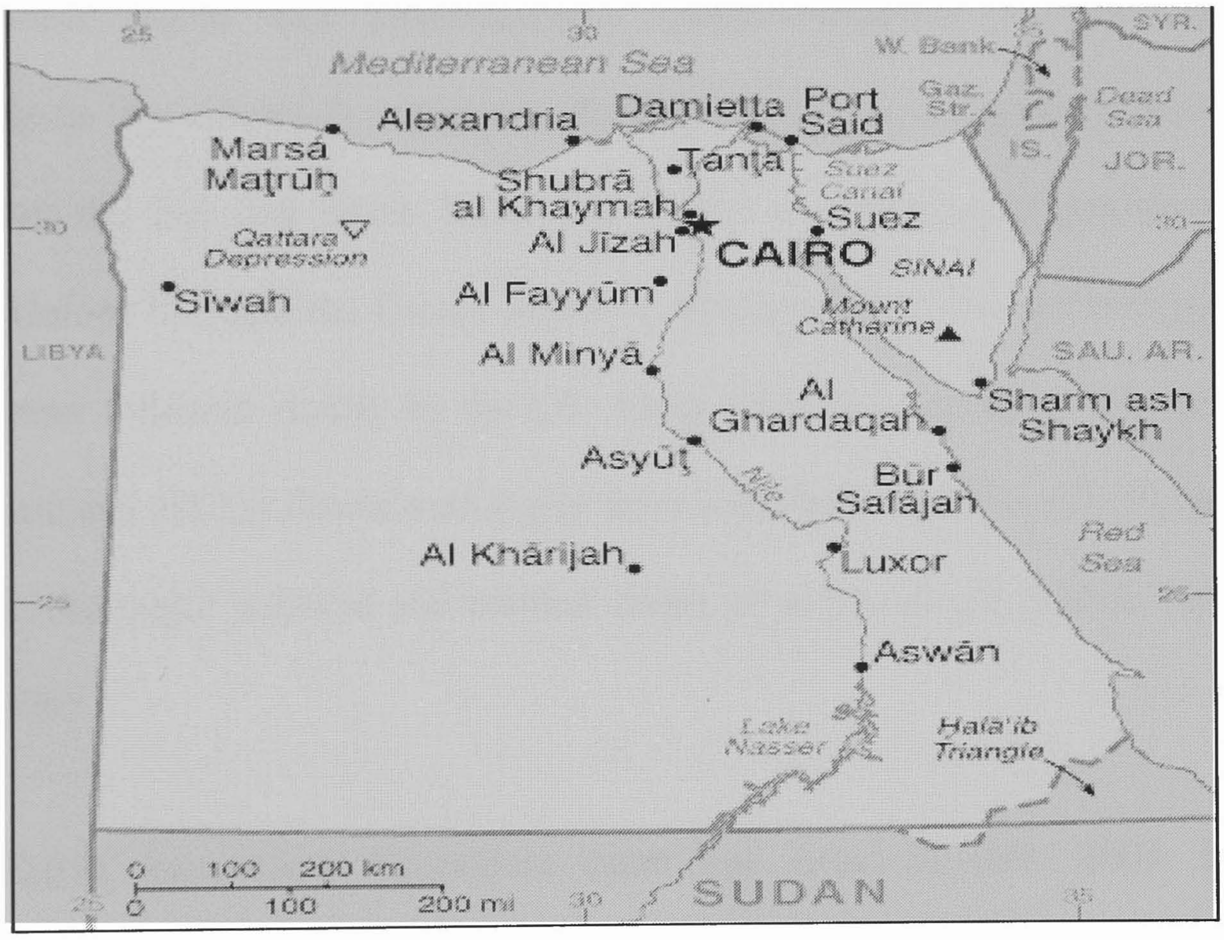
3.1 Introduction

To study an accounting issue, especially disclosure, in a specific country, it may be useful to consider the nature of development and to get a brief insight into some aspects of the environmental factors of this country. As indicated in chapter one the current study focuses on the voluntary disclosure practices in the Egyptian capital market. Over the past few decades, the business environment in Egypt, as one of the developing countries with an emerging capital market, experienced a remarkable economic reform that affected accounting practices and financial reporting. Accordingly Egypt provides a distinctive opportunity to study the disclosure practices issue in emerging capital markets. The purpose of this chapter is to present an overview of the Egyptian environment and to outline how Egypt is related to the current study. This chapter is organized as follows: section 3.2 provides background information on the Egyptian context and outlines the importance of Egypt in the Arab world and its international relationships. Section 3.3 presents the statutory framework in Egypt while section 3.4 summarises the different stages of development in the Egyptian economy. The development of the Egyptian capital market and corporate governance is presented in section 3.5. Section 3.6 sheds light on accounting and financial reporting framework. The summary is presented in section 3.7.

3.2 Background information

Egypt is an Arabian country and one of the Middle East and North Africa countries (MENA). It has a strategic location that links Africa and Asia. Egypt borders the Mediterranean Sea, Libya, the Gaza Strip, the Red Sea, Sudan, and includes the Sinai Peninsula. It is influenced by Europe, across the Mediterranean Sea. Egypt has a land area of about 1 million Km and has a remarkable length of coastline, about 2450 km. In addition it controls Suez Canal that links the Mediterranean Sea with the Red Sea and the Indian Ocean (CIA, 2008)[1]. Such a strategic location is considered to be one reason to carry out this empirical study in the Egyptian context, since Egypt could be representative of Arab countries, African countries, and MENA countries. Egypt has been examined in previous corporate governance studies in Arab countries (Harabi 2007), African countries (Rwegasira, 2000 and Nganga et al 2003) and MENA countries (Saidi, 2004).

Figure 3.1 Egypt country map



Source: www.cia.gov

Egypt has the largest population in the region. Estimates from 2008 put the population of Egypt at 81.7m. The main religion of the Egyptian people is Islam, with 90% of the population being Sunni Muslims, while Coptic Christianity is the major non-Islamic

[1] https://www.cia.gov/library/publications/the-world-factbook/geos/eg.html last accessed on the 16th of June 2008

religion practiced by approximately 10% of the population (CIA, 2008). Politically and economically, Egypt plays an important and influential role in the Middle East and Arab world. Regarding regulation, Egypt was the first Arab country to introduce commercial, civil and other laws which go back to the late nineteenth century and to organise its own national accounting profession and form its own institute of auditors. Furthermore, Egypt's Stock Exchange is one of the oldest stock exchanges in the world. (Abd-Elsalam and Weetman, 2003)

'Egypt's economy has diversified beyond its traditional agriculture base, with the oil and gas, consumer goods and pharmaceutical goods industries all now contributing significantly to the country's economy. Tourism is Egypt's largest foreign exchange earner. Over the last few years, Egypt has signed a number of agreements with the European Union (EU) and the United States of America (US). The EU is Egypt's largest trading partner followed closely by the US. Along with these agreements, a large amount of investment and aid has flowed into Egypt from both the EU and the US. Egypt is widely regarded as the major political and cultural centre of the Arab and Middle East regions' (NZTE, 2006).

The EU–Egypt Association Agreement came into force on June 2004. It includes provisions for initiating free trade between the EU and Egypt. The UK is the largest foreign investor in Egypt, with cumulative investments across a wide range of sectors estimated at £10 billion. UK companies are increasingly looking to Egypt as a hub from which to develop business in the region as a whole (FCO, 2008)[2]. The UK has identified Egypt as one of the top 10 emerging markets, thus encouraging investors to invest in the Egyptian market. Many investment and brokerage houses are operating now in Egypt,

[2] Foreign & Commonwealth office http://www.fco.gov.uk/en/about-the-fco/country-profiles/middle-east-north-africa/egypt?profile=intRelations&pg=4 last accessed on 16th June 2008

including HSBC, Morgan Stanley, Citibank, Fleming, ABN-AMRO etc. (Abdel-Shahid, 2002).

Economically, it is significant that the Egyptian economy has been growing over the last few years, and it is expected to continue. The real economic growth rose to 6.9% in the financial year 2006 after the anaemic 3% during financial years 2001-2003. Total investment is around 18- 19% of GDP, but private investment has been rising to over 12 percent of GDP. Foreign Direct Investment rose to $6.1 billion in 2006 (5.7% of GDP), from $3.9 billion (4.4% of GDP) in 2005. Large capital inflows helped build foreign exchange reserves to $29.6 billion as of July 2007. Despite these achievements the Egyptian economy faces some problems and challenges, including high unemployment, inflation and a budget deficit. While employment is growing, the unemployment rate remains around 10%. Also, Consumer Price Index (CPI) inflation has crept up since March 2006 to reach 12.4% in December 2006 - after falling for most of 2005 to some 3% in December 2005 - before falling to 8.4% in June 2007. Moreover, the budget deficit roughly reached 7.5% of GDP in 2007 (The World Bank, 2007)[3].

These economic indicators, along with strong international relationships, highlight the importance of changes made in recent years, outline the challenges that face the capital market participants and call for more effort from the government and regulators. In this regard the current study, investigating voluntary disclosure practices in corporate annual reports over the period 2003- 2006, can play an essential role and may have some important implications for emerging capital markets in general and the Egyptian capital market in particular.

[3] http://siteresources.worldbank.org/INTEGYPT/Resources/EGYPT-ENG2007AM.pdf last accessed on 16th June 2008

Furthermore, the Egyptian culture adds to the importance of the current study, though it is not a cross country study. It is commonly agreed that accounting and disclosure practices are affected by national culture (e.g. Gray, 1988; Dahawy et al, 2002; Roberts et al, 2008). Based on the Hofestede's (1980) societal values, Gray (1988) proposed and defined four accounting values: professionalism versus statutory control; uniformity versus flexibility; conservatism versus optimism; and secrecy versus transparency. While the first two values are related with authority and enforcement of rules the last two values are more related with measurement and disclosure. The secrecy versus transparency refers to the preference for confidentiality and the restriction of disclosure of information about the business only to those who are closely involved with its management and financing as opposed to a more transparent, open and publicly accountable approach. In this regard, Egypt has been characterized by a secretive and conservative culture (Abd-Elsalam and Weetman, 2007; and Dahawy and Conover, 2007). In such type of culture a number of questions can be raised about the disclosure practices in general and the voluntary one in particular. It is interesting to address whether Egyptian listed companies disclose more information voluntarily and which type of voluntary disclosure they focus on. Moreover, it will be helpful to investigate the effect of corporate governance characteristics on voluntary disclosure practices in such culture.

3.3 The statutory framework in Egypt

The legal framework that governs the Egyptian business environment includes several laws. Like other developing countries there were western influences on the legal system. Egypt has been influenced by both French and Anglo American laws, British and American. The French influence was on companies' law 159/1981 which was based mainly on French civil law. On the other hand, the British accounting profession heavily affected the Egyptian accounting practice through regulations; the Charter of Accounting and Auditing professions of 1958 were affected by the British CA of 1948 (Abd-Elsalam, 1999). In addition, Capital Market Law (95/1992) was established based on the concepts of Anglo-American common law.

The main laws governing the legal framework that impacts the concepts of corporate governance in Egypt can be classified into two main groups: the first governs incorporation of companies and the second governs listed companies (UNCTAD, 2007). Laws governing incorporation of companies include (1) Companies' Law (159/1981), which regulates joint stock companies, limited liability companies and partnerships limited by shares; (2) Investment Law (8/1997) endorses investment in specific industrial locations or economic sectors by offering specific income tax exemptions or tax free zones, and (3) Public Business Sector Law (203/1991) governs the incorporation of public business sector companies.

Laws governing public and private sector companies listed on the Cairo Alexandria Stock Exchange (CASE) include (1) Capital Market Law (95/1992), the main law regulating the Egyptian capital market in terms of monitoring the market status in general and maintaining steadiness and growth, and (2) Central Depository Law (93/2000), which maintains all registration, clearance and settlement procedures associated with trading transactions to reduce risks associated with trading physical securities.

This variety of laws that govern companies in Egypt may affect corporate disclosure practices, mandatory and voluntary, and could create a case of confusion for all stakeholders especially managers and investors. However, the Egyptian government recognizes the need to have one comprehensive law instead of these laws that include some conflicts that discourage more investment. Currently, the draft of the unified companies' law is being discussed in the people's assembly. Studying the financial reporting practices, including voluntary disclosure, of the listed companies may provide some important implications for the Egyptian capital market and other emerging capital markets.

3.4 Economic development

Although this research focuses on the most recent period, from 2003 to 2006, it is helpful to review the stages of economic development in Egypt through previous periods. In this regard, four key points can be identified: the Egyptian revolution in 1952, the war of October 1973, the economic reform programme in 1991, and the 2001 initiative taken by the Ministry of Economy and Foreign Trade (now the Ministry of Investment) to adopt the best practices of corporate governance and to improve disclosure and transparency of the stock exchange.

Before the Egyptian revolution in 1952 During this period Egypt was a British colony, from 1882 to 1952. Cotton was the principal product and the private sector dominated the economy. The Egyptian stock exchange was established in this period and was the first stock exchange in the Middle East, starting with The Alexandria Stock Exchange in 1888 and followed by The Cairo Stock Exchange in 1903. Both of them were very active in the 1940s and The Alexandria Stock Exchange was ranked the fifth most active in the world (Bremer and Elias, 2007). State intervention was limited to the provision of finance or equity participation. Foreign capital was heavily committed to the banking and exporting operations concerned with cotton and investment policies were liberal and investment laws were enacted to attract foreign capital (Abd-Elsalam, 1999).

From 1952 to 1973 During this period the Egyptian economy was characterized by central planning and nationalization. Socialist oriented policies were adopted and most foreign investments were nationalized. The Egyptian government started a variety of big industrial and agricultural projects which resulted in domination of the public sector (State Owned Enterprises). The role of the private sector was diminished even in the banking and exporting operations related to cotton. As a result of the new economic direction the Egyptian stock exchanges were de-activated and stopped.

From 1973 to 1991 After the war of 1973, an "open door policy" was adopted to attract foreign investments. This policy is considered as a return to market economy that encourages the flow of capital and technology by giving room to private sector alongside the public sector to participate in economic development. Accordingly the Investment Law no. 43 of 1974 "Arab and Foreign Investment and Free Zones"[4] was issued with some tax exemptions. The Egyptian Capital Market (CMA) was established by presidential decree no. 520 of 1979 in order to manage the stock exchange. In addition, the Tax Law no. 157 of 1981 and the Companies Act no. 159 of 1981 have been issued to encourage private sector to form and list companies on the stock exchange. Considerable tax incentives have been offered to listed companies; for example there was tax exemption equivalent to the three months' deposit rate paid by the Central Bank on paid- up capital. These tax incentives resulted in a dramatic increase in the number of listed companies over this period but the majority of them were not traded (Bremer and Elias, 2007).

While this may be seen as a new stage of activation of the Egyptian stock exchange, there was no great effect on the stock exchange activity that stayed insignificant until the early 1990s. In addition to the adverse effects of tax exemptions, the reasons include absence of

[4] It was amended by law no. 32 of 1977 and replaced by law no. 230 of 1989.

a governing securities law, inadequacy of financial disclosure, lack of protection of small investors, and adverse economic conditions[5] (Ragab and Omran, 2006).

From 1991 to 2001 Supported by the World Bank and the IMF, the Egyptian government launched in 1991 a comprehensive Economic Reform and Structural Adjustment Programme (ERSAP) (World Bank, 2002). The key elements of this programme include the introduction of a privatisation programme, the gradual moving toward market economics, the deregulation of interest rates and foreign exchange, and the introduction of new capital market law (Rizk, 2006). As such 314 public sector companies were identified for privatisation, partially or fully, and the Public Business Sector Law no. 203 of 1991 was issued to govern public sector companies with 51% or more.

Moreover, the Egyptian government issued the Capital Market Law (CML) no.95 of 1992 which aimed at encouraging private investment, increasing investor protection, and enhancing banks' role in stimulating capital markets through the establishment of mutual funds (Ragab and Omran, 2006). This law and its Executives Regulation of 1993 introduced a comprehensive accounting disclosure package for the first time in Egypt (Abd-Elsalam, 1999).

The comprehensive reform programme (ERSAP) has resulted in improvement in several economic indicators. For example, there were increasing in foreign currency reserves from about US $ 3 billion in 1990 to about US $ 21 billion in 1997, decreasing in budget deficit as a percentage of GDP from about 18% in 1990 to about 1% in 1997, and decreasing in external (foreign) debt from about US $ 49 billion in 1990 to about US $ 27 billion in

[5] Egypt was placed among the most heavily indebted countries in the world when the foreign external debt stocks increased to over $ 46 billion in 1986.

1997[6]. Although the considerable economic progress in terms of creating macroeconomic stability and establishing the basis for economic liberalisation and privatisation, progress toward a market economy has remained relatively slow (ECA, 2004). However, the Egyptian economy faced a series of crises and began to slow down since 1997. A remarkable crisis was the liquidity crisis that is a result of external and internal shocks to the economy, the Asian financial turmoil, the Luxor tourists' attack, the sharp drop of oil price, and the attack of the eleventh of September (Hussein and Nos'hy, 2001).

From 2001 till now Due to the liquidity crisis and the decline in the growth rate over the first three years of the new millennium, the Egyptian government decided to float the Egyptian pound in 2003. This decision helped in mitigating the severity of the problem. However, Egypt was aware that the successful economic reform programme depends on the existence of sound financial regulatory framework, availability of credible corporate information, and adoption of internationally accepted accounting and auditing standards (World Bank, 2002). Therefore, there was increasing awareness and interest in upgrading the legal and institutional structures to world standards. Egypt started to give due importance to the subject of corporate governance in 2001 with an initiative taken by the ministry of economy and foreign trade that started to install an organizational and supervisory framework that governs the private sector performance in the context of Liberalized markets (Fawzy, 2003 and Nganga et al, 2003). In this regard Egypt adopted several initiatives to restructure the capital market authority and the stock exchange and to reform corporate financial reporting and disclosure requirements, as well as accounting and auditing standards and practices.

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[6] Egypt was rewarded US $7 billion write off of its debt to USA after the Gulf War.

3.5 Egypt's Stock Exchange and Corporate Governance

As indicated previously the Egyptian stock exchange - Cairo and Alexandria Stock Exchange (CASE) - is one of the oldest stock exchanges in the world and the first to be established in the MENA region. It experienced stagnation for almost 40 years through nationalization and were revitalized in 1992 as one entity with two trading floors. Securities are automatically registered in both exchanges and listing fees are mutually divided (Fawzy, 2003; and Sourial, 2004). Currently, CASE is the only Arab stock exchange with full membership of the World Federation of Exchanges (WFE).

CASE is a governmental body under the supervision of The Capital Market Authority (CMA). It is managed by board of directors comprises eleven members: the chairman who is named by the Prime Minister, six members representing trading companies, two members representing banks, one member from the Central Bank, and one member from CMA. In addition there are four non-voting members. CASE is responsible for monitoring compliance with the listing rules, but it does not have investigation powers. CMA has the power to veto CASE board decisions. (World Bank, 2001, Fawzy, 2003, and Abdel-Shahid, 2003)

Due to privatisation and the reform program the CASE witnessed an increasing number of listed companies since 1992. The total number of listed companies in 1997 was 654 and increased to 1151 in 2002. The CASE achieved remarkable progress over the nineties. Therefore it was included in the global Emerging Market Investible Index since 1996 and in Morgan Stanley Index in 2001.

As the first Arab country to be assessed, The World Bank and the IMF reviewed in 2001 the corporate governance practices in Egypt against the OECD principles of corporate governance: rights of the shareholders, equitable treatment of shareholders, disclosure and transparency, role of stakeholders and responsibilities of the board of directors. The results indicated that 65% of the principles were applied in Egypt. The assessment identified the following areas to be strengthened: disclosure of ownership and control structures; disclosure of financial and non-financial information; training and capacity building for regulators and the private sector; role and effectiveness of shareholders' meetings; practices of boards of directors; professional conduct of auditors (World Bank, 2001).

To ensure the proper application of corporate governance principles, the CASE issued in August 2002 the new listing rules and gave listed companies one year as a transitional period. The new rules emphasize timely disclosure of corporate actions, financial statements (annual and quarterly) as well as material events by issuers, prohibit insider trading, encourage good corporate governance practices by issuers, require audit committee, and impose, for the first time, penalties on issuers in case of failure to disclose on time. The penalties include aggressive fines and suspensions from trading which encourage many illiquid companies to delist. (Abdel-Shahid, 2003, Fawzy, 2003, and UNCTAD, 2007)

As a result of the new listing rules, there was considerable decrease in the number of listed companies. Most of the delisted companies were small companies and closely held (Mustafa, 2006). At the end of 2007, there were 435 listed companies, down from 1,151 at the end of 2002. However, there was significant increase in market capitalization during the same period from LE 122 billion to LE 768 billion. The CASE was the world's best performing emerging markets exchange in 2004 and 2005[7] (ICC, 2006). Table 3.1 presents the main indicators of Egyptian stock exchange over the period 2001 to 2007.

Table 3-1 Main indicators of Egyptian Stock Exchange over the period 2001 to 2007

Indicator	2001	2002	2003	2004	2005	2006	2007
Total volume in (billion)	1.3	.9	1.4	2.4	5.3	9.1	15.1
Total value traded (LE billion)	31.8	34.2	27.8	42.3	160.6	287.0	363
Total number of transactions (million)	1.1	0.8	1.2	1.7	4.2	6.8	9
Average daily value traded (LE million)	129	137	114	170	645	1,176	1,488
Number of trading days	246	249	244	249	249	244	244
Number of listed companies	1,110	1,151	978	795	744	595	435
Number of traded companies	643	671	540	503	441	407	337
Market capitalization end of year (LE billion)	112	122	172	234	456	534	768
Market capitalization as % of GDP	30%	29%	35%	43%	74%	80%	105%

Source: CASE, Stock Market Annual Report (2007)

Furthermore, the CASE formed the exchange's Investor Relations and Corporate Governance Committee, which is made up of representatives from the top ten CASE-listed companies that are the best in disclosure and act as the blue chip companies to their peers. The committee plays a communications and advisory role, and also sponsors events and publications. It may be worthwhile to mention that most of the exchange's efforts to promote transparency and corporate governance have been aimed at the top companies that make up the CASE 50, which account for 80 per cent of trading volume. For example there was a meeting with all of the CASE 50 companies to explain the role of audit committees

[7] Newsweek magazine named it one of the world's ten best stock markets for 2005.

in good corporate governance. Some of these initiatives have subsequently been extended to the CASE 100 companies, which account for nearly all of the exchange's trading. (ICC, 2006)

As a result of the legislative reforms, the World Bank, in March 2004, updated its evaluation of the application of corporate governance principles in Egypt from 65% in 2001 to 85% of the OECD principles. This re-assessment indicates that Egypt is continuously improving in the area of corporate governance (World Bank, 2004, and UNCTAD, 2007).

However, board responsibilities and disclosure and transparency were identified to be two areas of weakness in corporate governance in Egypt (Fawzy, 2003; and Bremer and Elias, 2007). In his report 2004, the World Bank pointed out that annual and quarterly reports miss some nonfinancial disclosure such as forward-looking information, risk factors and governance. The report also noticed the slow adoption of audit committee. Regarding the board structure, it was noticed that the chairman and CEO are same person (role duality), the lack of rules that govern member's independence, and the relatively limited accessibility of information by non executive directors. Table 3.2 presents summary of observance of OECD corporate governance principles.

The report recommended that non financial disclosure requirements should be explicitly laid out in law or listing rules and immediate attention should be paid to corporate governance disclosure issues. Moreover, the report recommended drafting a code of corporate governance, adopting the rule of 'comply or explain', and considering the concept of 'independent director'.

Such results and recommendations highlight the importance of addressing the association between disclosure practices and characteristics of the board. The current study aims to investigate the association between voluntary disclosure practices in the annual reports and board characteristics, its composition, leadership, and size.

The Egyptian Institute of Directors (EIoD)

One of the important Egyptian initiatives to strengthen corporate governance was the establishment of the Egyptian Institute of Directors (EIoD) in 2003. EIoD is the first institute dealing with corporate governance in the Arab region. It aims to spread awareness and to improve good corporate governance practices not only in Egypt but also in the MENA region. According to the Presidential decree no. 231/2004, the institute is responsible for educating and promoting the principles of corporate governance. It operates under the umbrella of the Ministry of Investment and collaborates with many leading international organizations such as the World Bank, International Finance Corporation (IFC), and Centre for International Private Enterprise (CIPE). (UNCTAD, 2007)

The Institute organizes conferences, seminars and training sessions on corporate governance, targeting different categories including directors, auditors and accountants, businessmen, and anyone interested in knowing more about corporate governance. EIoD jointly with IFC offer a number of training programmes such as the 'certified director programme' which is accredited by the Institutional Shareholder Services, fundamentals of corporate governance, corporate governance in family–led companies, and corporate governance for state owned enterprises. (Bremer and Elias, 2007)

Table 3.2 Summary of observance of OECD corporate governance principles

Principle		O	LO	PC	MO	NO	Comment
							I. THE RIGHTS OF SHAREHOLDERS
IA	Basic shareholder rights	X					• Basic rights observed. Some compliance gaps in clearing and settlement.
IB	Rights to participate in fundamental decisions.		X				• Shareholders participate in most fundamental decisions with 66/75 percent supermajority.
IC	Shareholders AGM rights		X				• No major reported problems. Notice period 15 days.
ID	Disproportionate control disclosure		X				• Companies disclose at 5 percent level. Most ownership reportedly formally and informally well understood.
IE	Control arrangements should be allowed to function.		X				• Very limited takeover rules. CMA informally enforcing mandatory bid rule.
IF	Cost/benefit to voting				X		• At present, uncommon for institutional investors to have voting policies, and some don't vote.
							II. EQUITABLE TREATMENT OF SHAREHOLDERS
IIA	All shareholders should be treated equally		X				• Share voting info may be difficult to obtain. Slow court system. CMA is powerful redress mechanism.
IIB	Prohibit insider trading			X			• Insider trading not specifically addressed in law, but is administratively enforced.
IIC	Board/Mgrs. disclose interests		X				• Accounting standards follow IAS 24. New listing rules add to RPT disclosure requirements.
							III. ROLE OF STAKEHOLDERS IN CORPORATE GOVERNANCE
IIIA	Stakeholder rights respected	X					• Stakeholders have a number of legal protections. Employee board representation relatively rare.
IIIB	Redress for violation of rights	X					• Stakeholder have access to legal process to obtain redress.
IIIC	Performance enhancement	X					• Company law grants employees automatic rights to 10 percent profit sharing. Employee share ownership in some privatized companies.
IIID	Access to information		X				• Employees, bondholders, others have rights to information by law.
							IV. DISCLOSURE AND TRANSPARENCY
IVA	Disclosure standards			X			• Annual and quarterly reports. Some missing non-financial disclosure (forward-looking MD&A, risk factors, governance).
IVB	Standards of accounting & audit		X				• Standards generally close to IAS; compliance uncertain.
IVC	Independent audit annually			X			• No audit oversight board (but included in draft accounting law). New listing rules require audit committee, but slow adoption.
IVD	Fair & timely dissemination		X				• Many channels of information.
							V. RESPONSIBILITIES OF THE BOARD
VA	Acts with due diligence, care		X				• Single tier boards. Frequently, Chairman and CEO are same person. Two members can be appointed "experts."
VB	Treat all shareholders fairly			X			• Limited legislative guidance on duty of care and duty of loyalty, but some jurisprudence.
VC	Ensure compliance w/ law		X				• Company law requires board to take interests of employees into account.
VD	The board should fulfill certain key functions			X			• In practice, boards of most companies do not play central / strategic role, and are not clearly different from management.
VE	The board should be able to exercise objective judgment				X		• No rules that govern independence. Few companies appoint independent directors.
VF	Access to information	X					• Most directors are insiders and have access to information. Can be more difficult for non-executives sometimes because information is not available.

Source: - The World Bank (ROSC, 2004): O observed; LO largely observed; PO partially observed; MO materially not observed; and NO not observed

EIoD announces that membership will be available to different types of members such as founding members, sponsors, corporate, and individual members that are interested in the application and enhancement of good corporate governance practices in Egypt and the MENA region. In addition, the membership extends to non-Egyptians who are attracted by the Egyptian market and/or would like to benefit from the leading role Egypt has undisputedly taken in governance and business practices.

Egypt Code of Corporate Governance As a response to the recommendations, the EIoD, with support from the World Bank and the IFC, issued the Egyptian Code of Corporate Governance for listed companies in October 2005. The code presents guidelines and standards of corporate governance and written in Arabic and English. The code is divided into nine related chapters that cover the following: scope of implementation, general Assembly, board of directors, internal audit department, external auditor, audit committee, disclosure of social policies, avoiding conflict of interest, and corporate governance rules for other corporations.

These guidelines are to be primarily implemented in joint-stock companies listed on the stock exchange, especially those undergoing active trading operations, financial institutions in the form of joint stock companies, and companies that use the banking systems as a major source of financing. However, companies are not required to apply these rules of corporate governance. The code itself states that:

> *"These rules should be considered an addition to the corporate-related provisions stated under various laws - especially the Law on Shareholding Joint Stock Companies, Partnerships, and Limited Liability Companies issued by virtue of Law #159/1981; the Capital Market Law issued by virtue of Law #95/1992 and the executive regulations and decrees regarding their implementation. Yet, what makes these rules unique and different from all others stated under the abovementioned*

laws is that the rules governing corporate governance are neither mandatory nor legally binding; rather, they promote and regulate responsible and transparent behavior in managing corporations according to international best practices and means that strike equilibrium between various party interests". (p.4)

Moreover, the Egyptian code of corporate governance doesn't follow the rule of "Comply or explain" though it was recommended by the World Bank and is followed in other countries such as UK and Malaysia. As such the Egyptian code of corporate governance suffers from lack of enforcement that may affect its implementation.

In July 2006, the EIoD issued guidelines of corporate governance of State Owned Companies. The code introduces the principles of governing State owned companies by presenting an organizational and legal framework within which such companies should operate. In addition, the code focuses on the actions of the State as a regulator versus its role as an owner. It also presents the principles for equitable treatment of all shareholders, including the State as a shareholder, conflict of interest issues, disclosure and transparency, and responsibilities of the board of directors. (UNCTAD, 2007)

In addition to training courses for directors of listed and unlisted companies, EIoD organizes an annual disclosure award for the best annual report and the best website. This competition began in 2006 to promote world-class standards in corporate reporting and transparency. It is noteworthy that the winners in 2006 and 2007 are the same. The EIoD stated that '*the 30 companies of CASE had participated in the competition and the results were unexpected, as, it was observed that a lot of companies didn't implement or were committed to the transparency & disclosure principle. While other companies were adopting the principles for a great extent that commensurate the international principles*'[8]

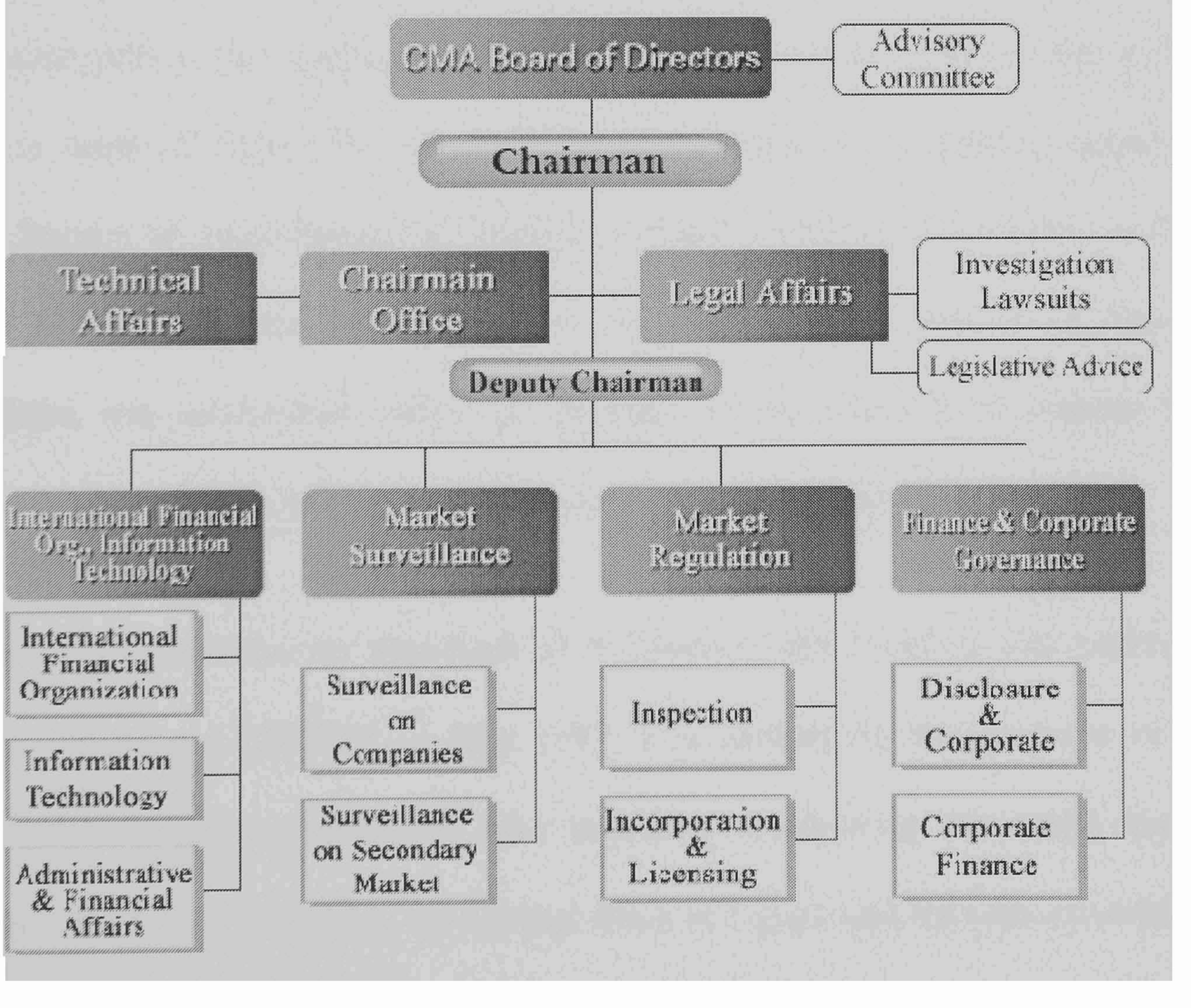
[8] www.eiod.org/eiod-team/winner-en.html last accessed on the 16th of June 2008

However, these results raise a question about the characteristics of companies with higher level of disclosure. The current study attempts to answer this question.

To strengthen the boards of directors in regional companies and to ensure that corporate governance principles will be applied properly, the Institute issued, in May 2007, a manual for audit committees and launched a national campaign to update the corporate governance code issued in October 2005 for listed companies. (UNCTAD, 2007)

As a response to the increasing awareness of corporate governance, CMA, in 2005, changed its organizational structure to allocate a separate sector focused on corporate finance and corporate governance. The new structure is shown in figure 3.2

Figure 3.2 organization structure of CMA



Source: CMA's website

3.6 Accounting profession:

Egypt has a history in the field of financial management and accountability, it was the first country in the region to organize its own national accounting profession and form its own institute of auditors. The Charter of Accounting and Auditing profession was issued in 1958. (World Bank, 2002)

The accounting profession evolved over time according to the economic development. Over the period of nationalization and central planning, accounting information was required for planning purposes. Therefore, the Central Auditing Organization (CAO) became the public organization authorized to audit the public sector companies, and the Uniform Accounting System (UAS) was issued in 1966 to govern the financial reporting of public sector companies. With the growth of foreign investment in Egypt during the period of open door policy, the number of accounting firms increased and the big audit firms returned to work in Egypt. To be linked with international accounting agencies, The Egyptian Society of Accountants and Auditors became a member of the IASC In 1980 and in 1983 it became a member of the IFAC. In 1987, The Egyptian Institute of Accountants and Auditors was established under the umbrella of the Ministry of Finance to issue Egyptian standards which were issued as recommendations. (Abd-Elsalam, 1999)

The Permanent Committee for Standards of Accounting and Auditing was established by the ministerial decree 478/1997 in May 1997. It is chaired by the chairman of Capital Market Authority and composed of nine members representing the major accounting associations, the CAO, the CMA, the Central Bank of Egypt, and the General Authority of Free Trade and Investment. Although official responsibility for setting accounting and auditing standards rests with the Permanent Committee, the Egyptian Society of Accountants and Auditors in practice has the main responsibility for drafting accounting and auditing standards. International accounting and auditing standards that are applicable to the Egyptian situation were selected and translated to Arabic language.

The Ministerial Decree 503/1997 was the first to introduce Egyptian Accounting Standards (Abd-Elsalam and Weetman, 2003). 19 Egyptian Accounting Standards (EAS) were issued in 1997. One year later, in 1998, Egypt issued additional three accounting standards. To be in harmony with the revised IAS, the Ministry of Foreign Trade issued, in 2002, (by Ministerial Decree No. 345) three new Accounting standards. The first of these new standards concerns with disclosure, titled "the presentation of financial statements". This standard replaced three Egyptian accounting standards related to financial reporting, and became effective from January 1, 2002. The purpose from these standards is to improve and enhance the quality of financial reporting and transparency.

In October 2000, Egyptian Standards on Auditing (ESAs) were issued by the ministerial decree no. 625. This decree mandate ESAs to audit financial statements issued after September 30, 2000. International Standard Auditing (ISAs) will be applied to auditing issues not covered by the ESAs. Only, six Egyptian Standards on Auditing had been issued by the ministerial decree. It can be noticed that Egyptian Standards on Auditing focus only on reporting issues and do not cover other areas of International Standards on Auditing (ISA). However, ISA should be followed in the absence of Egyptian auditing standards.

To monitor audit quality and practices, practitioners committee within the Syndicate of accountants was created by the Presidential Decree 323/2002. Its purpose is to establish a strong monitoring and enforcement mechanism for improving the quality of audit. As a response to the recommendations of the World Bank's Report (World Bank 2002), the ministry of Foreign Trade issued a new accounting standard, in 2004, concerning the code of ethics for professional accountants and auditors. However, the new Egyptian accounting standards (35 standards prepared according to international standards) were issued, in 2006, by the ministerial decree no. 243/2006 to replace the old Egyptian accounting standards.

From the above discussion it can be noticed that Egyptian government is aware about the importance of strengthening the Egyptian accounting and auditing standards and make them in line with international standards. However, we can notice that there was no change in the mandatory disclosure requirements over the investigated period of the current study; from 2003 to 2006. Therefore the extent of voluntary disclosure practices in each of the four years can be measured with the same disclosure checklist that will be presented in chapter five.

3.7 Conclusion

It is commonly agreed that corporate financial reporting as an accounting topic is influenced by a number of socioeconomic factors. This chapter presented an overview of the contextual factors that justify the Egyptian context as an opportunity to address the voluntary disclosure practices in emerging capital markets. It started with background information, location; population; economic indicators; international relationships; the influential role in the region, that underlines how Egypt is a good representative of the MENA countries; where there is a lack of disclosure studies as indicated in chapter two. In addition, the Egyptian culture; secretive and conservative; enables the research to analyze and interpret the voluntary disclosure practices over the investigated period.

The chapter continued with a review of the economic development stages and highlighted the Egyptian economic reform programme and its effect on the capital market. The chapter indicated the Egyptian government's commitment to enhance transparency and corporate governance practices in the Egyptian stock exchange. It presented the Egyptian initiatives to restructure its institutions and regulations which have been recognized by the World Bank and international organizations. Such initiatives motive the research to address the voluntary disclosure practices in Egypt. Also they provide opportunity to examine the relationship between voluntary disclosure practice and corporate governance characteristics which represent a recent stream of disclosure literature, as indicated in chapter two. Finally the chapter reviewed how the accounting profession and financial reporting framework have been evolved in Egypt.

Given the abovementioned analysis of the Egyptian business environment it would stand to reason that a reasonable extent voluntary disclosure and corporate governance practices could be expected from the most active Egyptian listed companies. Before presenting the research methodology in chapter five, the next chapter clarifies the theoretical framework of the current study.

Chapter Four: The Theoretical Framework

4.1 Introduction

The previous chapters outline the subject matter of this study which is the voluntary disclosure practice and its association with corporate governance. As indicated in chapter two, there is a need for more research on the disclosure policy and corporate governance practices in emerging capital markets in general and MENA in particular. Chapter three presented an overview of the Egyptian environment as a context of the study where there is a lack of published research about the voluntary disclosure practices. Before developing the research hypotheses and carrying out the empirical section, the current chapter aims to present the theoretical base of the study.

Academic thought in the accounting area was based largely on research which relied primarily on neo-classical economic analysis, particularly, the neoclassical theory of the firm that assumes economic rationality and market equilibrium. This theory was developed to help economics predict behavior at the industry and market levels of analysis, not to explain the behavior of managers (Scapens, 1984; 1994).

To overcome this criticism, a number of researchers use costly contracting economics, agency theory, while others employ transaction cost economics. Both of them acknowledge the importance of analyzing the nature of institutional aspects when studying economic activities. While the first think about institutions as instances of market–like contracting among individuals, the second considers institutions as alternatives not instances (Ibid). Scapens and Arnold (1986) point out that although these theories recognize institutional variables, they still retain the core assumptions of neoclassical economics.

A number of researchers in accounting literature, e.g. Hopwood (2000), indicate that there is a need to use a different or broader view to study accounting topics. They support explaining observed practices by examining their role within the broader organizational, social, political and cultural dimensions in which accounting information is used. In this regard, the institutional economics framework is considered to be an economic approach that seeks to introduce into the analysis such social, political and cultural dimensions (Scapens, 1994).

In the context of disclosure, as an accounting topic, it can be noticed that disclosure literature employs several theories as guidance in explaining disclosure practices. There is no comprehensive theory of disclosure and more work is suggested and called for to understand disclosure practices (Hopwood 2000; Healy and Palepu, 2001; Verrecchia, 2001).

Regarding corporate governance, the case is the same as with disclosure. Different theoretical frameworks; such as agency theory, stakeholder theory, and stewardship theory; have been used to explain and analyze corporate governance practices. It is argued that corporate governance does not have an accepted theoretical base or commonly accepted paradigm as yet (Parum, 2005). Reviewing corporate governance literature, it can be noticed that agency theory and stakeholder theory are the dominant theories. Mueller (2006) point out that central to any discussion of corporate governance is the question of how well a particular set of institutions mitigates the various principal agent problems that arise in a firm. However, legitimacy theory was used to address the potential effects of corporate governance and culture on social disclosure (Haniffa and Cooke, 2005).

The current chapter aims to provide a critical review of the most common theories employed in disclosure literature. For the purpose of the study, the most common theories can be classified into five categories: regulatory approach; economic approach; political economic approach; socioeconomic approach and, cost - benefit approach. Regulatory approach is presented in section 4.2. Agency theory; signal theory and capital need theory represent the economic approach in section 4.3. The political economic approach: legitimacy, stakeholder, and political costs theories; is reviewed in section 4.4. Different types of institutional theory are summarized in section 4.5 and followed by the cost benefit approach in section 4.6. Finally, summary and conclusion will be presented in the last section which provides the rationale beyond choosing the theoretical base in the present study.

4.2 Regulatory approach

Two competing theories of accounting regulation can be identified: public interest theory and private interest theory. Public interest theory assumes that regulation is needed to correct the imperfections of the free market system and benefit the general public. On the other hand private interest theory argues that regulation primarily results in assistance of the profession, so it is a response to the need of special interest groups. While the first theory considers regulation as a way to improve social welfare the second theory thinks about regulation as a method to maximize the wealth of specific interest groups. (Riahi-Belkaoui, 2002)

Taylor and Turley (1986) indicate that accounting regulation tends to impose constraints upon preparation, content and form of external financial reports by bodies other than the preparers and users of these reports. Advocators of regulation think about accounting information as a public good and argue that without regulation the management may misuse disclosure. On the other hand opponents of regulation argue that managers have incentives to disclose information, e.g. to send messages to others, accordingly there is no need for a regulation to mandate disclosure requirements (Ross, 1978 as cited in Lev and Penman, 1990; Dye, 1990).

Although it is commonly agreed that information can be viewed as a good which has costs and benefits, there is no agreement about the view of accounting information as a public good. Some authors indicate that corporate information has the characteristics of public goods which are: indivisibility; all users can use it without any effect on the quantity of other users; and non-excludability; it is available for all users even who have not paid for it (Coffee, 1984 as cited in Vlachos 2001).

On the other hand, a number of authors point out that accounting information combine features of private and public goods. Using information by an investor to get a specific benefit may reduce the probability of achieving the same benefit from the further using of this information by other users (Watts and Zimmerman, 1986). In addition, Davis and Menon (1987) indicate that it seems reasonable to presume that both public and private interest considerations are present in any decision to institute regulation.

According to Vlachos (2001), it seems that the case for regulation is stronger for two main reasons. The first is the failure of the opponents of regulation to develop a convincing case, supported with empirical evidence, which is free from exceptions or restrictive assumptions. The second reason is the existence of some form of regulation in all capital markets. Vlachos illustrates that the degree of regulation in each market depends on the form of its efficiency as well as an array of other social, political and other environmental factors. Scott (2003) classifies the governmental involvement into two groups; the direct one through the laws and compulsory disclosure requirements and indirect involvement through creation of securities commissions.

Taplin et al (2002) indicate that one crucial component of accounting regulation is the profession's compliance with the industry rules. Non-compliance with accounting rules puts more pressure and responsibility upon the regulatory enforcing function. They cite Walker (1985) that without enforcement the production of accounting rules will be nothing more than symbolic behavior unless it is accompanied by some program for monitoring compliance with those standards, and for imposing sanctions for non-compliance.

Taplin et al (2002) conclude that the high levels of non-disclosure of compliance leads to a call for more government direct intervention in the accounting regulatory process, particularly with the need for more extensive disclosure of compliance with accounting rules. Such direct intervention is consistent with public interest theories of regulation. A number of authors support the view of continuing government involvement in accounting regulation because a government is in a much better position to enforce compliance with accounting standards than any professional accounting agency (Walker 1990, and Taplin et al 2002).

Marston and Shrives (1991) distinguish between mandatory and voluntary disclosure. They point out that the required disclosure is laid down by statute, professional regulations and the listing requirements of Stock Exchanges. So, the extent to which companies comply with legal and regulatory requirements depends on the strictness or laxity of the government, professional and other regulatory bodies. Shaffer (1995) argued that the possibility of benefiting from such compulsory disclosure requires a minimum of three conditions: existence of a genuine economic problem, greater disclosure plays an important role to solve this problem, and a basis for believing that requirements will succeed in increasing the overall amount of relevant information.

However, Inchausti (1997) indicates that there are two types of pressures to which accounting information is subject. The first is market pressure and the second is the pressure from regulatory bodies. In this regard, a space for manager's incentives to disclose more information voluntarily can be noticed in both perfect and imperfect markets.

According to the cultural dimensions of Hofstede (1980), developing countries are classified as countries with strong uncertainty avoidance, large power distance and collectivism. Gray (1988) developed hypotheses linking Hofstede`s cultural dimensions to accounting values. One of these hypotheses, specifically secrecy and transparency, is related to disclosure issue; developing countries are classified as secretive. Thus it can be said that the need for disclosure regulations in developing countries, which have emerging capital markets, is greater than developed countries. In other words the governmental intervention through accounting and disclosure regulation may be necessary to ensure the minimum amount of information for public, by providing a disclosure pattern, and to add some reliability of financial reporting. Such a pattern of disclosure will make companies more familiar with disclosure requirement and provide the base or the threshold for the voluntary disclosure.

As indicated in chapter two, a number of prior disclosure studies have addressed the relation between the level of disclosure and the change in regulations that affect corporate disclosure decision. However, Naser and Nuseibeh (2003) provide evidence that the formation of a new regulatory body had insignificant impact on the level of disclosure in Saudi companies.

From the above discussion, it can be noticed that the regulatory approach, governmental intervention, is more related to mandatory disclosure than voluntary. However, Dye (1986) argues that increasing mandatory reporting requirements increases the incentives for voluntary disclosure. Since the current study focuses only on voluntary disclosure practices and covers a period without a significant change in mandatory disclosure requirements, the regulatory approach is considered to be irrelevant for the purpose of the study.

4.3 Economic approach

Economic approach focuses on the goal of profit maximization and concentrates on the interests of two parties only, shareholders and managers. Three disclosure theories can be classified under this approach, agency theory, signaling theory, and capital market theory.

4.3.1 Agency Theory

One of theories that have been used widely in disclosure literature is agency theory. It has been used in accounting, economics, finance, marketing, political science, organizational behavior, and sociology (See: Eisenhardt, 1989). As a result of the separation between ownership and management or control, agency theory has been used to explain the relationships within organizations. The theory focuses on the relationship between two contracting parties, the principal (owners) and the agent (managers). Such relationship involves delegation some decision making authority to managers (Jensen and Meckling, 1976). Therefore, managers have power to use the resources and consequently have all information about the company. On the other hand owners; resources providers, have the power to hire managers and need information to evaluate the performance. As such there is a problem of information asymmetry. It is assumed that individuals are effort averse and act in self- interest to maximize their benefits. So, the theory indicates that there is an interest conflict; or lack of goal congruence; between agent (managers) and the principal (owners); agent may take decisions that maximize their benefits but not necessarily maximize the benefits of owners. Such confli ct requires a number of mechanisms to measure and monitor the agent's behavior and, therefore, leads to agency costs

In the context of disclosure, information asymmetry has been identified as one of the motivations of voluntary disclosure decision (Healy and Palepu, 2001). It can be noticed that disclosure is one of monitoring devices used to reduce agency costs (Craswell and Taylor 1992). The two parties may use the level of disclosure as a way to mitigate the severity of the problem of information asymmetry. Managers have an incentive to signal that they are acting in the interests of owners. On the other hand, owners try to encourage and sometimes force managers to disclose more information.

Based on agency theory, many hypotheses have been developed in disclosure literature. Jensen and Meckling (1976) pointed out that there is a higher potential for interest conflict between owners as a principal and managers as an agent in a widely held company. The greater the size of the company the greater the agency costs. Therefore, agency theory predicts a positive relationship between company size and disclosure. In the same way, the theory predicts a positive relationship between disclosure and each of gearing, listing status, and auditor quality. Chapter six will discuss this issue further. Examples of disclosure studies that employed agency theory in explaining the variation in disclosure practices include Cooke, 1989; Ruland et al, 1990; and Hossain et al, 1994.

However, a number of authors criticize the assumption of agency theory that individuals act in self- interest to maximize their benefits. They indicate that there is an overestimation of motivating managers to act in the owners` interests. Moreover, there are internal and external pressures that direct the performance of managers to serve the interests of owners in addition to their interests. Consequently, it may help to reduce agency costs, or at least, to mitigate the severity of the problem. Managers' reputation and the threats of bankruptcy and takeover (the managerial labor market) constitute examples of this pressure. (Fama, 1980; Eisenhardt, 1989; Ashton, 1991)

Moreover, agency theory ignores the fact that managers have significant motives to conceal adverse information or artificially enlarge the firm's short term results in order to maximize their benefits related to these short term results (Vlachos, 2001; Ghazali, 2004). Demski (1974) suggests that managers may also have incentives to disclose more information to differentiate themselves from more poorly run companies. Coffee (1984) pointed out that agency theory ignores the fact that some managers have strong incentives to withhold positive information. Ockabol and Tinker (1993) indicate that this theory fails to account for non-financial motivations for suppressing disclosure.

Because of shareholders' interests can only be satisfied by taking account of stakeholder interests, Solomon (2007) argue that theoretical frameworks that suggest companies should be accountable only to their shareholders are not necessarily inconsistent with theoretical frameworks that champion stakeholder accountability.

It is widely accepted that disclosing more information voluntarily may improve the quality of the annual report (Healy and Palepu, 2001; and Watson et al.; 2002). Given that managers aim to reduce agency costs using disclosure, the agency theory can explain why managers wish to improve their disclosure quality. Consequently, it can be expected that voluntary disclosure practice will be associated with some variables such as ownership structure, attributes of board of directors and firm characteristics.

4.3.2 Signaling theory

As indicated before, information asymmetry is one of the problems in business environment. The concept of signaling was developed in 1973 by Spence; based on the seminal paper of Akerlof in 1970. Signaling is a general phenomenon applicable in any market with information asymmetry. The theory shows how asymmetry can be reduced when the party with more information signals it to others (Morris, 1987). Similar to agency theory, the signaling theory recognizes the separation of ownership and management and recognizes that the market pressures motivate managers to disclose information. Managers have more information about the company than others such as owners and investors. To distinguish themselves from other companies, managers may desire to send signals to interested parties; owners, investors, and governmental agencies. In this regard disclosure is considered to be one of the means that can be used.

Not only companies with good news have incentives to signal others but also companies with bad news or no information. Managers of companies with bad news may have incentives to disclose the bad news to reduce the reputation costs that may be incurred if they do not disclose this news in the relevant time (Skinner 1994). Also, companies with no information may wish to distinguish themselves from companies with bad news.

Furthermore, companies have incentives to continue with disclosing information to avoid the adverse understanding if they do not disclose (Ross, 1979).

Verrecchia (1983) indicate that a manager's decision to disclose or withhold information depends upon the effect of that decision on the market, the price of a risky asset. The manager decides either to withhold or release this signal on the basis of the information's effect on the asset's market price. He pointed out that there is an equilibrium threshold level of disclosure. The manager exercises discretion by choosing the point, or the degree of the information quality, below which he withholds his information, and above which he discloses.

However, the signal must be credible; otherwise the subsequent disclosures will be considered as incredible. Furthermore, the signal must not be easily copied by poor quality sellers (managers). Verrecchia (1990) showed how a change in the quality of information received by a manager affects the manager's threshold level of disclosure. He indicated that there is a negative relation between information quality and the threshold level of disclosure. The higher the quality of the information the lower the threshold level of disclosure.

The assumption of signaling theory that individuals are acting in their own-self interest, as in agency theory, has been criticized. Also, a number of authors criticize the assumption of equal distribution of power. They argue that it is not individuals who exercise power but institutions (Gray et al 1996 as cited in Watson et al. 2002). Furthermore, Newman and Sansig (1993) draw attention to the difficulty of the signaling process when many parties or multiple users are involved.

Moreover, Ockabol and Tinker (1993) indicate that there is a question whether non disclosure means bad news especially in a highly competitive environment. Non disclosure in this case aims to protect the company from adverse effects not to hide or mitigate the severity of bad news. Dye (1985) pointed out that even a company with good news may choose to withhold information. On the other hand a company with bad news may choose to disclose this news if the company is worried about the competitors` reaction to this information. A number of authors indicate that the reason of non disclosure may be that managers do not have information to disclose (Penno, 1997) or uncertainty about the effect of disclosure on the manager's performance (Nagar, 1999).

The interaction between agency theory and signaling theory:

Morris (1987) concludes that agency theory and signaling theory are consistent and there is a considerable amount of overlap exists between them. Because they do not share the same necessary conditions, they are not equivalent, nor does one theory imply the other. He points out that the sufficient conditions of both are consistent. The two theories recognize rational behavior; information asymmetry (the necessary condition of the signaling theory) is implied in agency theory; quality can be defined in terms of agency theory variables; and signaling costs are implicit in some bonding devices of agency theory. He suggests more research is needed to combine both theories to get more general meta-theory which might improve the prediction of accounting choices.

4.3.3 Capital need theory

According to this theory, the main motivation for disclosure is the need to raise capital at the lowest possible cost. To get capital more cheaply, either in the form of shares or loans, companies employ disclosure as a means to help in reducing investor uncertainty, and information asymmetry. Alexander and Archer (1995) indicate that the main role of financial reporting is to reduce information asymmetries in capital markets, and so it may improve the market efficiency. There is doubt about the sufficiency of mandatory disclosure to acquire the cheapest capital (Core, 2001). Disclosing less information or non disclosure may be more expensive (Meek and Gray, 1989). Investors may ask for information risk premium (Barry and Brown, 1986; Merton 1987; and Suwaidan, 1997). More disclosure reduces the cost of capital, reduces information risk, and improves the share price (Diamond and Verrecchia, 1991; Cooke, 1993; Hossain et al. 1994; Botosan, 1997. Sengupta, 1998; Healy and Palepu, 2001). In other words, companies compete with each other on the extent of information disclosed and other incentives to get capital with lowest cost (Meek et al.; 1995).

4.3.4 Evaluation of economic approach

Agency theory, signaling theory and capital market theory all are derived from the pure economic approach. This approach suffers from some limitations. It is based on the desire for income and avoiding loss (Bedford, 1973 as cited in Haniffa 1999). Consequently, it concentrates on profit maximization as a main goal of managers and ignores other goals. Also, this approach concentrates on only two parties of stakeholders; managers and shareholders; and pays no attention to other interested parties in the society, such as government, taxation authorities and consumer groups. Moreover, the economic domain cannot be studied in isolation from the political, social and institutional framework within which the economic action takes place (Gray et al.; 1995).

Crowther and Jatana (2005) criticize agency theory and consider it as a cause of failure in corporate governance. Among the three main criticisms, there may be no relationship between the principal and agent. They indicate that there is no requirement or even expectation that a shareholder will remain shareholder for extended period of time. In addition managers under share option schemes may be considered also as principals. Therefore Crowther and Jatana argue that the foundations of corporate governance in this environment; the reliance upon agency theory as a mechanism for managing a business; are problematic.

However, the criticism; no relationship between the principal and agent; highlights the wider concept of stakeholder theory. Even if there is no requirement that the shareholder will keep shares for extended period of time; there are other stakeholders that represent the principal under this theory. Moreover, when a shareholder sells his shares he will convert from shareholder to stakeholder and will stay as a principal.

Abdelsalam (1999) pointed out the applicability of disclosure theories in developing countries. She indicated that the most common disclosure theories were originated in western countries which have environmental factors different from developing countries. In addition, these theories have been based on the assumption of efficient capital markets. She concluded that both theoretical models of agency and capital needs appear to be applicable to the findings of developing countries studies, but the applicability of signaling theory is not clear due to several reasons such as: investors may be less sophisticated or unavailability of data. However a large number of disclosure studies in developing countries utilized these theories. In addition, there is an accelerated direction in most of developing countries toward market economy and globalization.

Due to the limitations of economic approach, a number of studies employ the political economic approach which takes into consideration the relation with society and other institutions.

4.4 Political economic approach

The political economic approach considers the issue of distribution power and wealth in society. So, it recognizes the interaction between society, politics, other institutions and economic aspects. This approach does not concentrate on managers and owners only but considers other parties such as society, government, and other institutions. In an accounting context, it is assumed that accounting and financial reporting in a country is affected by its environment (Cooke and Wallace, 1990). The prominent disclosure theories derived from this approach are legitimacy theory, stakeholder theory and political costs theory. The following paragraphs highlight the main points under each of these theories.

4.4.1 Legitimacy theory

Organizations operate in society and their actions affect and are affected by a number of environmental factors. Legitimacy theory is based on the notion that organization has a social contract; with its society; where it agrees to act according to socially desired actions (Guthrie and Parker, 1989). That means organization's actions are monitored by the public. Legitimacy theory argues that organizations can only continue to exist if the society recognizes it as acting within acceptable value system (Rizk, 2006). Based on this theory, organizations aim to get social approval, in other words to legitimize their actions. (Patten, 1991; Mathews, 1993; Reich, 1998 and Deegan, 2002)

To legitimize its actions, company has four ways or strategies: (Lindblom, 1994 as cited in Rizk, 2006) First, educate and inform its relevant stakeholders about changes in the company's performance, secondly, change the perceptions of the relevant stakeholders but not change its actual behavior, thirdly, manipulate perception by deflecting attention from the issues of concern to other related issues through an appeal, and lastly, change the external expectations of its performance.

Watson et al, (2002) pointed out that two of Lindblom's strategies may be relevant to disclosure of accounting ratios. First, disclosure of ratios may help educate and inform users about changes in the organization's performance (Lindblom's first strategy). Second, it may help deflect attention away from other areas (Lindblom's third strategy).

It can be noticed that disclosure can play an important role in each of these four strategies. By disclosing more information voluntarily, managers can communicate with the society and its stakeholders. As such, managers will try to legitimize corporate activities and at the same time to legitimize their managerial positions. Legitimacy theory has been employed in disclosure literature to explain disclosure practice. Due to the idea of societal acceptance, the majority of disclosure studies addressing environmental and social disclosure draw on this theory. The evidence provided from these studies support the idea of using disclosure as a means for legitimacy (e.g. Guthrie and Parker, 1989; Patten, 1992; Deegan and Gordon, 1996, Deegan, 2002; Deegan *et al*, 2002; O'Donovan, 2002; O'Dwyer, 2002).

Although this widespread in environmental and social disclosure, a number of studies conclude that legitimacy theory was inadequate to fully explain social reporting behavior (Guthrie and Parker, 1989; O'Dwyer, 2002; as cited in Ghazali, 2004). Moreover, it may be difficult to measure or qualify the concepts of society's values and ethics when forming testable hypotheses. However, the social values in which a company exists affect the manner used by company to operate and report its performance (Gray et al.; 1995).

Therefore, it is assumed that considering social and political environment may be helpful to address the motivation for corporate social choices (Adams et al., 1998).

4.4.2 Stakeholder theory

While agency theory concentrates only on the relationship between managers (agent) and shareholders (the principal), stakeholder theory considers the relation between managers and all stakeholders (the principal); such as shareholders, employees, customers, suppliers, and government. Based on stakeholder theory, a variety of stakeholders are involved in the organization and each of them deserves some return for their involvement. (Crowther and Jatana, 2005)

Stakeholders can be classified into two categories: the first is a primary stakeholder group which includes those who are essential to the continuation of the company, such as shareholders, employees, suppliers, investors and the government. The second is a secondary stakeholder group which includes those who are not essential to the survival of the company, but they affect or are affected by the company; such as the media (Rizk, 2006).

According to this theory, managers should assess the importance of every group of stakeholders and try to satisfy them. For the purpose of benefit maximization, managers must work on behalf of all stakeholders not only the shareholders. Consequently, shareholders will benefit, as the main stakeholder, on the long run. However, there are contradicting views on this theory.

On one hand, Sternberg (1997); a proponent of agency theory; criticizes stakeholder theory based on some points. The author argues that this theory is incompatible with business and also with corporate governance. It rules out the objective of business which maximizes long term owner value. Also, the theory implies that a company should be accountable to everyone not to their owners and encourages managers to violate their prior obligations to owners. In addition, Sternberg indicates that balancing stakeholder benefits is an unworkable objective and unjustified. Moreover, stakeholder theory undermines private property and accountability.

On the other hand, Turnbull (1997) points out that there are some empirical evidences that do not support the first two criticisms of Sternberg. On the contrary, Turnbull argues that stakeholder relationships can legitimate and protect private property, agency, and wealth.

However, three aspects of stakeholder theory can be identified, descriptive; instrumental and normative (Donaldson and Preston, 1995). The first; descriptive; is used to describe and explain specific firm characteristics and behaviors such as how board members consider the interests of corporate constituencies, i.e. stakeholders. The second; instrumental; concerns with the connections between stakeholder management and the achievement of corporate objectives such as profitability. The third one; normative; is used to interpret the function of the corporation and the related moral and ethical guidelines. Donaldson and Preston (1995) state that:

> "*Stakeholder theory has been advanced and justified in the management literature on the basis of its descriptive accuracy, instrumental power, and normative validity. These three aspects of the theory; although interrelated, are quite distinct; they involve different types of evidence and argument and have different implications*" (p.65).

Under both agency and stakeholder theories, managers as an agent should act on behalf of the principal; whether shareholders or all stakeholders. Hill and Jones (1992) have constructed a paradigm based on both of agency and stakeholder theories. They called it stakeholder-agency approach. They indicate that this approach can be viewed as a modification of agency theory; which assumes efficient markets and rejects the idea of power differentials between managers and stakeholders; to accommodate theories of power; resource dependence theory that assumes inefficient markets which recognize the existence of unequal resource dependencies between managers and stakeholders.

Voluntary disclosure can be used by managers to communicate with stakeholders and to acquire their support (Watson et al, 2002). The different stakeholders have different priorities (Wolfe and Putler, 2002), and need different information. Moreover their ability to get information is different. So, the effective use of disclosure policy, especially the voluntary one, may help in building the trust with the shareholders and other stakeholders. In this regard Rowley (1997, p.907) states that:

> *"Firms do not respond to each stakeholder individually but instead must answer the simultaneous demands of multiple stakeholders"*

To deal with this issue, managers should consider a number of points such as information cost and competition degree. In addition, the power held by a stakeholder will affect the disclosure decision (Mitchell et al, 1997). That means managers must make a balance, or tradeoffs, between the stakeholders' information needs. Rizk (2006) indicates that stakeholder theory may be particularly relevant in developing countries, transitional economies and highly regulated industries. To address the voluntary disclosure practice, one should consider the different types of voluntary disclosure which may aim to satisfy the stakeholder's information needs.

4.4.3 Political costs theory

According to political costs theory companies that are more sensitive to political pressures will adopt accounting choices that reduce expected political costs (Watts and Zimmerman 1978). A number of studies employ political costs theory to explain voluntary disclosure. Based on this theory it is assumed that there is positive association between disclosure and sensitivity to political pressures. Although Watts and Zimmerman (1978) acknowledge company size as a noisy proxy for political sensitivity, a number of studies use company size as a proxy for political costs. However, some studies indicate that industry sensitivity may be a proxy for political costs (Patten, 1991; Blacconiere and Patten, 1994; and Patten and Nance, 1998)

Milne (2002) reviews social and voluntary disclosure studies that have relied on positive accounting theory, Watts and Zimmerman (1978), as a theoretical base. He notes that none of the studies provide the full arguments of Watts and Zimmerman as they relate to discretionary management behavior. There were no studies employs all three hypothesized predictors of behavior (the bonus plan hypothesis, the debt/equity hypothesis, and the political cost hypothesis). Most of them only use the size or political cost hypothesis, and therefore they must be considered weak tests of the original argument. Moreover, Milne indicates that none of the studies take the opportunity to examine management behaviors other than the chosen disclosure variable that one might expect to exist if self-interested income reducing strategies were being adopted as hypothesized.

According to Milne (2002), the arguments related to the purpose of voluntary disclosures are not consistent among the positive accounting literature. For example, Belkaoui and Karpik (1989) and Panchapakesan and McKinnon (1992) indicate that there is no direct role for social disclosures. They consider disclosure as by-product of social responsibility expenditures, which in turn are argued to result in reported income reductions. However other studies (e.g. Deegan and Hallam, 1991; Lemon and Cahan, 1997; Jantadej and Kent, 1999) focus on disclosure itself as management behavior. But they fail to argue how such disclosures relate to reductions in profits. Consequently, they move away from Watts and Zimmerman's (1978) original arguments and extend the notion of political costs. They shape their arguments with other social theories of disclosure, and so fail to rule out alternative explanations. Moreover, they fail to convince or provide any evidence on how such disclosures might serve as a lobbying device.

Gray et al. (1995) and Milne (2002) indicate that positive accounting studies have little to offer to our understanding of firms' social disclosure behavior. While Gray et al. (1995) focus on the assumptions of these studies to reject their arguments, the Milne (2002)shows that positive accounting theorists have failed to offer any substantive evidence to support the view of using annual report social disclosures by managers to maximize their own wealth interests.

Milne (2002) conclude that in almost all cases the empiricists setting out to examine positive accounting theory as a basis for social disclosure behavior have failed to follow the arguments of Watts and Zimmerman's original thesis. Furthermore, the studies have failed to generate adequate tests of the arguments they do present.

4.4.4 Evaluation of political economic approach

From the above discussion it can be noticed that each of legitimacy theory, stakeholder theory and political theory provide an explanation to disclosure practices but also each of them suffers from some limitations. While legitimacy theory explains and predicts that companies use disclosure to legitimize their business, it is insufficient to fully explain the disclosure practices. Rizk (2006) questioned about the applicability of legitimacy theory to developing countries that have low level of social disclosure. On the other hand, stakeholder theory implies that managers identify the importance of stakeholders based on their power. In this regard, it may worth to mention that Gray et al (1995) indicate that the social disclosure literature has not developed the distinctions between legitimacy, stakeholder and political economy theories as far as it might. They state that:

"The essential problem in the literature arises from treating each as competing theories of reporting behavior, when stakeholder theory and legitimacy theory are better seen as two (overlapping) perspectives on the issue which are set within a framework of assumptions about political economy.....Therefore the differences are in levels of resolution of perception rather than arguments for and against competing theories as such" (Gray et al, 1995, p.52)

Deegan (2002) highlights the links between legitimacy theory and other theories such as stakeholder theory and institutional theory. Moreover, he points out the benefits of employing more than one theory.

Bedford (1973), as cited in Haniffa 1999, suggested that the structure of accounting should extend into the fields of psychology, sociology, ecology, anthropology, political science and biology in order to provide realistic bases for accounting disclosure. Hopwood (2000) indicates that the institutional and social aspects of financial accounting are still relatively unexplored. He argues for the importance of research that can provide more adequate insights into the wider institutional and social positioning of financial accounting. The next section addresses institutional theory, as an example of socioeconomic approach, in more detail.

Rizk (2006) indicate that the notion of legitimacy is also central to institutional theory due to the overlapping nature of many theories. Under this theory, organisations will change their structure or operations to conform to external expectations about what forms or structures are acceptable or legitimate. Contrary to legitimacy theory, wherein there is perceived to be an ability of managers to alter perceptions of legitimacy, perhaps through disclosures, under institutional theory managers are expected to conform with "norms" that are largely imposed upon them (Deegan, 2002). The next section summarize the different types of institutional theory.

4.5 The socioeconomic approach:

There is an increasing interest in institutional theory. It has been widely utilized in social sciences in general and in accounting literature in particular (Scott, 1995). Institutional economics is concerned with studying an economic phenomenon within its entire surrounding environment which includes social, cultural, political, ideological, religious, civilization, technological factors. In other words, institutional theory considers that the economic system is a subsystem of the larger societal or cultural system. It acknowledges that people are influenced by, and function in, an evolving cultural process (Gruchy, 1984; Scapens, 1994).

The focal point of institutional theory is that an organization's survival requires it to conform to social norms of acceptable behavior as much as to achieve levels of production efficiency (Hussain and Gunasekaran 2002). Fogarty (1996) indicates that the key attribute of institutional theory lies in its ability to highlight the distinction between what organizations actually accomplish and what their structures suggest to the external environment they should accomplish. However, institutional theory has different types which are summarized in the following paragraphs.

4.5.1 The different types of Institutional Theory

In recent years, various types of institutional theory have been used to gain insights into organizational change and accounting practices. These include: old institutional economics (OIE) which is concerned with the institutions that shape the actions and thoughts of individual human agents, new institutional economics (NIE) (transaction cost), which is concerned with the structures used to govern economic transactions; and new institutional sociology (NIS), which is concerned with the institutions that shape organizational structures and systems. It might be helpful to outline the nature of these three types of institutional theory.

4.5.1.1 Old Institutional Economics (OIE)

The OIE; the most established and oldest type of institutional theory; considers individuals as a cultural product affected by their institutional and cultural situations, therefore it is important to add other dimensions (anthropological and evolutionary) to the economic dimension. OIE theory is a thought or action of some prevalence and permanence, which is embedded in the habits of a group or the customs of people (See: Furubotn and Richter, 2000; Scapens, 1994; Hodgson, 1993; Ahmed and Scapens 2000; Dequech, 2002).

Burns (2001) indicates that this theory explicitly rejects the assumptions of given (rational-optimizing) individuals, and thus, there is a clear overlap between OIE and NIS. The old institutionalists claim that the individual is a product of his social environment and that "economic man" is not necessarily a universal phenomenon (Olsson, 2000). OIE focuses on the dynamics of the change process rather than the outcomes of a change event (Burns, 2001). Consequently, OIE emphasizes on studying economic activities as part of a holistic ongoing process of change. Thus the adoption of new structures, systems and behavior in organizations, such as International Accounting Standards and their disclosure requirements, would be strongly influenced by politics, society, and the cultural environment.

This theory makes the 'institution' the unit of economic analysis and provides a potentially useful basis for understanding the institutionalized character of organizational routines and rule-based behaviors. In this approach, human beings, organizations, and the economic system itself are regarded as part of a larger social system. However, there is no universal definition of the term of institution (See Burns and Scapens, 2000; and Yazdifar, 2003).

Scapens (1991) indicates that OIE theorists argue that the adoption or rejection of changes should be studied in relation to historical, cultural, social and political issues that are relevant to comprehend organizational change in its full complexity. The implementation of new systems, such as new disclosure requirements or code of corporate governance, will succeed to the extent that there is broad congruence between the new systems (rules) and existing routines and institutions in companies (Yazdifar, 2003). That is, the successful implementation or rejection and resistance to a new system or practice depends on whether the norms and values underpinning this adoption are in accordance with the norms and values of actors who are going to adopt, implement and use it.

It can be noticed that routine, rule, and habit concepts play an important and basic role in old institutional economics (Burns and Scapens 2000, and Dequech 2002). All of these concepts may be applicable to the disclosure policy that governed by disclosure requirements (rules) and determined by the culture (habits) of the preparer of financial reporting.

However, OIE is criticized as its focus is primarily on the micro (individuals, groups and organizations) rather than the macro-level institutions. Moreover, the concern expressed regarding limitation of OIE is its insufficient attention to environmental pressures (Yazdifar, 2003).

Burns (2000; 2001) argues that OIE is more suitable for studies of processes of change and resistance to change within organizations. In particular the theory is effective in investigating the role of power, politics and vested interests in change.

4.5.1.2 New Institutional Economics (NIE)

Furuboton and Richter (2000) indicate that the central message of New Institutional Economics (NIE), also called the New Theory of Organization, is that institutions matter for economic performance. In other words, a distinguished feature of this theory is its insistence on the idea that transactions are costly. The analysis using this theory is based on the elementary insight that the creation of institutions and organizations, and their day-to-day use, requires the input of real resources. Essentially, this theory recognizes transaction costs. The basic elements in the literature of NIE are transaction costs, property rights, and contractual economics.

In addition, to explain the determinants of institutions and their evolution over time, the purpose of NIE includes evaluating the impact of institutions on economic performance, efficiency, and distribution. The relationship between institutions and economic growth is mutual. i.e., institutions have a profound influence on economic growth, and, economic growth often results in a change in institutions (Nabli and Nugent, 1989).

Ahmed and Scapens (2000) point out that while this approach seeks to broaden the domain of economic analysis by examining transactions and governance structures internal to the firm, it does not recognize the impact of the broader economic, political and social institutions which can be important in understanding the development of accounting practices. Robins, (1987) points out that New Institutional Economics has been criticized for failing to recognize the importance of the institutional environment. Also, Martinez and Dacin (1999) argue that transaction cost economics cannot explain all organizational actions and outcomes because efficiency is not the overriding imperative guiding organizational and individual decisions.

However, NIE faces some basic problems in its theoretical framework. According to Hopper and Armstong (1991) these problems are as the following:

- The lack of precise definition of the term "transaction costs"
- The failure to consider links among product markets, power and organizational forms.
- The failure to consider the influence of social and political processes on the development of firms.
- The failure to consider the potentially exploitative nature between capitalist firms and their employees.

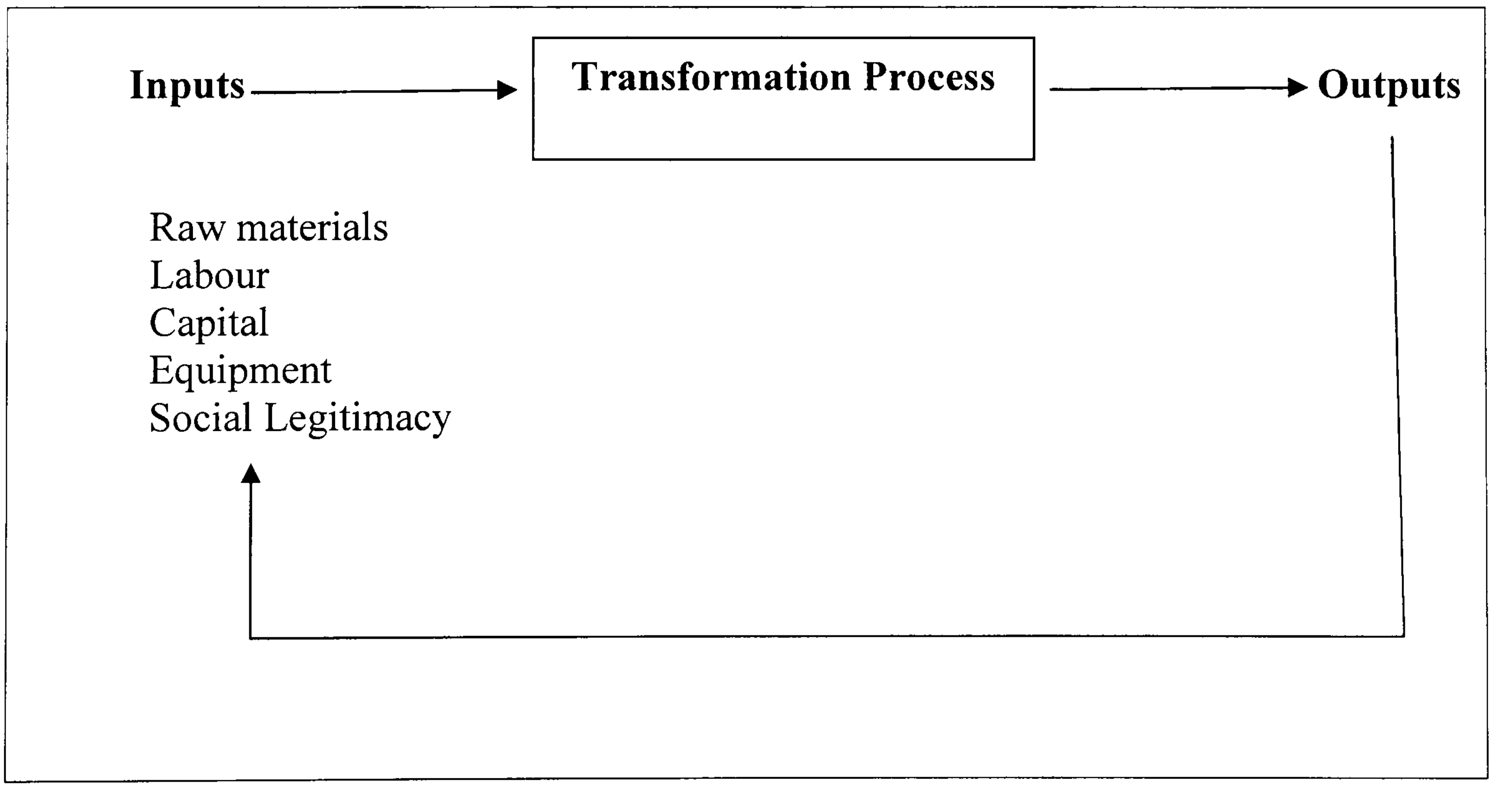
A number of studies indicate that one of the defining characteristics of NIE is that institutions act primarily as constraints upon the behavior of given individuals (Khalil, 1995; Hodgson, 2000).

From the above discussion, it can be observed that NIE does not provide a full explaining of accounting practice in its broad perspective. Consequently, in the context of disclosure, we can conclude that NIE may be not suitable for studying disclosure practices especially in developing countries. There are two reasons for this conclusion, the first due to the difficulty to define and identify transaction costs in developing countries, and the second is the availability of other theories that may help in understanding disclosure practices.

4.5.1.3 New Institutional Sociology (NIS)

While recognizing the social and cultural basis of external influence on organizations is one of the contributions of institutional theory, neo institutionalists moved beyond recognition to describe the processes by which practices and organizations become institutions (Hatch and Cunliffe, 2006). NIS focuses on change at an extra-organizational (or macro) level and primarily focuses on the 'legitimation' of organizational structures, forms and processes in society. It is suggested; based on institutional theory, that social legitimacy is considered to be an input to the organizational transformation process, see figure 4.1, along with other resources (Hatch and Cunliffe, 2006, p.88).

Figure 4-1 social legitimacy as an organizational resource



Source: Hatch and Cunliffe (2006, p.88)

Based on NIS, organization success is defined by the extent to which an organization embodies society 'ideals' concerning norms of rational behavior. Furthermore, more societal legitimacy is said to be achieved through conforming to society norms. Such legitimacy, which affects an organization's structure, defines an organization's domain of activity, and is the main factor for survival and growth (Yazdifar, 2003; Meyer et al., 1993). According to Hussain and Hoque (2002) NIS has contributed significantly to the understanding of relationships between organizational structures and the wider social environment in which organizations are situated.

DiMaggio and Powell (1991) suggest that, as a result of institutional pressures, organizations will adopt similar characteristics through the desire to organize themselves in a manner that is similar to other organizations in the same environment. In other words, organizations are subject to rules and regulations to which they must conform to ensure their legitimacy, in order to have access to resources and ensure their survival. These rules and regulations do not necessarily ensure they continue to operate efficiently (Meyer and Rowan, 1977; DiMaggio and Powell, 1991; Scott and Meyer, 1983).

Such process is called isomorphism and captures the process of homogenization". "Isomorphism" is loosely synonymous with "convergence". It is a key element of NIS theory. This assumes that organizations adopt (or "morph" to) structures and management practices which are considered legitimate and socially acceptable by other organizations regardless of their actual usefulness. (Saudagaran and Diga, 1997; Rodrigues and Craig 2006).

While actions may be repeated because explicit rules or laws; legal and political influences, activity patterns is supported by norms, values and expectations; cultural influences, and by a desire to look like others; social influences (Hatch and Cunliffe, 2006). DiMaggio and Powell (1991) identify three mechanisms through which institutional isomorphic change occurs: coercive isomorphism, mimetic isomorphism and normative isomorphism.

The first mechanism, coercive isomorphism, stems from political influence and the problem of legitimacy. It is the response to "both formal and informal pressures exerted on organizations by other organizations [and impinging external factors e.g., government policy, regulation, supplier relationship] upon which they are dependent and by cultural expectations in the society within which organizations function.

The second mechanism, mimetic isomorphism, occurs when organizations face uncertainty and model themselves on other organizations. Organizations will tend to copy those organizations in their organizational field that are perceived to be more legitimate or successful or those outside their organizational field that are similar to themselves in complexity.

The third mechanism, normative isomorphism, arises when professionals operating in organizations are subject to pressures to conform to a set of norms and rules developed by occupational/professional groups. In this form of isomorphism, Burns (2000) indicates that firms feel obliged to adopt structures and processes that have been advocated by dominant professions and professional bodies.

In the context of disclosure practice, coercive isomorphism can be represented by the pressures exerted to comply with disclosure requirements. Coercion takes place through mechanisms of authority, legitimation and the power to compel organizations to comply with the mandatory disclosure requirements.

Mimetic isomorphism will take place when an organization perceives that increased disclosure, especially voluntary disclosure, will contribute and result in an improvement in its image and its competitive position. It may be helpful to emphasize that mimetic isomorphism is a process of change initiated internally by the organization. As a consequence, it may be expected that the number of organizations that disclose more information voluntarily will increase over time.

Regarding normative isomorphism, it can be noticed that disclosure practices are subject to pressures to conform to a set of norms and rules; accounting standards, new listing rules, corporate governance code; developed by occupational/professional groups. Generally, firms feel obliged to comply with the mandatory disclosure requirements that have been advocated by dominant professions and professional bodies.

Institutional theory, specifically (NIS), has been applied in a number of financial reporting studies for example; Carpenter and Feroz, 2001; Chalmers and Godfrey, 2004; Brands, et al 2005; and Rodrigues and Craig, 2006). Carpenter and Feroz (2001) employ institutional theory to explore how institutional pressures exerted affects the adoption of generally accepted accounting principles for external financial reporting by public sector entities. The authors argue that institutional theory is complementary to economic theory in general and resource dependency theory in particular.

Also, Chalmers and Godfrey (2004) use institutional theory to investigate managers' responses to derivative financial instrument disclosure requirements. They indicate that managers respond in a manner that can be explained by legitimacy and institutional theories and the maintenance of the managers' and their firms' financial reporting reputations to deal with societal pressures to make derivative activities more transparent.

Their results imply that legitimacy and institutional theories provide a plausible explanation as to what impulse prompted managers' responses.

Rodrigues and Craig (2006) use institutional theory as one of three complementing lenses to assess international accounting harmonization. They deploy an innovative analytical approach (including Hegelian dialectic, isomorphism and Foucault) to explore and improve understanding of the processes, effects and likely future progress of the convergence of national accounting standards with international financial reporting standards. They indicate that new institutional theory is useful in explaining developments in international accounting over time.

Recently, a number of disclosure studies use institutional theory; to explain the voluntary disclosure practices on the internet. For example, Xiao et al (2004) employ the concept of isomorphism in examining the determinants of voluntary internet based disclosure in China. In addition, Bonson and Escober (2006) use institutional theory to address the variation in information disclosed by companies in European Union countries on their web pages.

In addition, institutional theory has been applied to Financial accounting standards setting by the FASB (Fogarty, 1992), the changing process of standard setting and regulation in UK (Radcliffe et al. 1994). Moreover, Fogarty (1996) discusses the institutional theory and the insight it provides into the accounting profession's self regulation actions. In developing countries in transition, Al-Twaijry et al (2003) use institutional theory to address the development of internal audit in Saudi Arabia while Hassan (2008) relies on institutional theory to address the development of accounting regulations in Egypt.

4.5.2 Evaluation of NIS4

There are a number of criticisms made of NIS, Ahmed and Scapens (2000) argued that while this approach focuses on how institutionalized rules, values and expectations influence the firm, it does not explore how the firm shapes the institutionalized rules, values and expectations. Uzzi (1996) argued that although the concept of embeddedness is useful for understanding the sociological failings of standard neoclassical schemes, it does not explain concretely how social ties affect economic outcomes.

Yazdifar (2003) classifies the problems that face NIS in three groups: the first is the neglecting of power issues and actors' interest-based behavior. The second is incapacity to explain processes of organizational change. The third is the lack of consideration of internal generation of institutionalized forms. He points out that these criticisms indicate that the theory suffers from 'inadequate consideration of the relationship between environment/institutional determinism and cultural and political factors within organizations. He cited with Scott (1987) that NIS needs to be complemented by other perspectives.

To overcome the criticisms and to get better understanding of economic activities in a broader perspective, there is an increasing convergence and integrative efforts, in the organizational literature, among these theoretical approaches. Yazdifar (2003) indicates that there have been lesser signs of convergence between new institutional sociology (NIS) and old institutional economics (OIE). He argues that an institutional perspective incorporating both NIS and OIE expands the levels of analysis encompassing both extra-(macro) and intra-(micro) organizational factors and consequently enhanced our understanding to conceptualize organizations actions and practices. He believes that the two theories can be complementary and that neither can independently fully explain organizational behavior.

In the context of disclosure, it can be argued that institutional theory can improve our understanding of disclosure practice whether mandatory or voluntary. The compliance with mandatory disclosure requirements, as new systems or rules, will increase to the extent that there is broad congruence between the new systems (rules) and existing routines and institutions inside companies. On the other hand, the concept of isomorphism will help in understanding the voluntary disclosure practices. In general, new institutional sociology (NIS) may provide an extension to the disclosure literature and enhances the knowledge about disclosure on the micro and macro level. It may be worth to refer here to the overlap among institutional theory, legitimacy theory and stakeholder theory (Deegan, 2002). The processes of legitimation through isomorphic mechanisms, the quest of social legitimacy, and power and institutional theory constitute the institutional theory framework (Hassan, 2008).

4.6 Cost - benefit analysis approach

As illustrated earlier, accounting information can be viewed as an economic good that subject to demand and supply. Accordingly, there are costs and benefits from producing accounting information. The cost benefit analysis of disclosure must be taking into consideration in addressing the disclosure decision especially by management as a producer (Bhushan and Lessard, 1992). It should be mentioned that there is no agreement about specific measures of the monetary value of costs and benefits from disclosure and as such it is difficult to quantify most of disclosure's costs and benefits. Moreover, one of the problems, and may be the biggest one, is isolating changes in behavior arising only from disclosure (Elliott and Jacobson, 1994 and Gray et al, 1984). The following paragraphs summarize the potential costs and benefits from disclosure.

4.6.1 Disclosure costs

To prepare financial reporting, companies expend economic resources. However, it is commonly agreed that disclosure costs can be classified into two groups, direct and indirect costs. Direct costs involve the value of resources used in gathering, developing, processing, auditing, and dissemination accounting information. On the other hand, litigation costs, proprietary costs, and political costs are examples of indirect costs. In this regard it may be necessary to emphasize that the cost object here is the annual report. Therefore cautions must be taken regarding the classification of some items such as costs of preparing information for managerial purposes and other committed costs. The internal organizational structure of the company and the harmony between internal and external needs of information may affect the direct costs of disclosure. The advancement in information technology helps in reducing the cost of preparing and dissemination accounting (Elliot and Jacobson, 1994). Consequently, it can be expected that companies will tend to disclose more information. While the direct costs of disclosure may be more important in developing countries (Abu-Nassar and Rutherford, 1995); the indirect costs may be more significant than direct costs in developed countries, (Gray and Roberts, 1989).

Abayo et al. (1993) provide another classification of disclosure costs. They point out that there are costs of compliance and noncompliance with disclosure requirements. While compliance costs relate to training and updating knowledge of those applying the regulation, noncompliance costs originate from two sources: market pressures and government-imposed sanctions or administrative pressures.

Litigation costs One of the disclosure costs that companies may face is litigation costs. When users of financial reporting consider disclosure as misleading they may take legal reactions that result in litigation costs. Accordingly, companies may use disclosure to protect themselves from possible future lawsuit and avoid or mitigate the litigation costs. A number of studies use litigation costs to explain the disclosure decision, but the empirical evidence is mixed. While some authors (Waymire, 1984; Lev and Penman, 1990) indicate that companies may be hesitate to provide information about bad news since users may take unfavorable reactions, others (e.g. Skinner,1994) using litigation costs to predict that companies have incentives to disclose voluntarily bad news information. Skinner (1994) indicates that market reaction to bad news is greater than market reaction to good news. He argues that there is incentive for management to disclose bad news to reduce litigation costs. However, Francis et al (1994) and Skinner (1997) did not find evidence that voluntarily and early disclosure as a defensive mechanism may deter shareholder lawsuits.

Proprietary costs The nature of competition is important in determining the level of disclosure. The disclosure of proprietary information can lead to proprietary costs and can be harmful if competitors use it to get benefits on the account of the company (Verrecchia, 1983). The proprietary costs of disclosure increase in more competitive industries. Therefore it is expected that companies in less competitive environment, less proprietary costs, will disclose information more than companies in highly competitive environment.

In contrast, Darrough and Stoughton (1990) argue that competition through threat of entry may encourage voluntary disclosure. They indicate that disclosing more information is expected under competitive pressures. In other words the higher entry costs leads to decrease in the probability of entry. Nevertheless, the majority of information disclosed in annual reports is intended to general users and generally does not include the relevant information that competitors seek (Gray et al, 1984). In this regard it may be helpful to differentiate between mandatory and voluntary disclosure. The severity of competitive disadvantage may be higher under voluntary disclosure than mandatory disclosure. Also, the same point may be used to explain the variation in the level of compliance with mandatory requirements.

4.6.2 Disclosure benefits

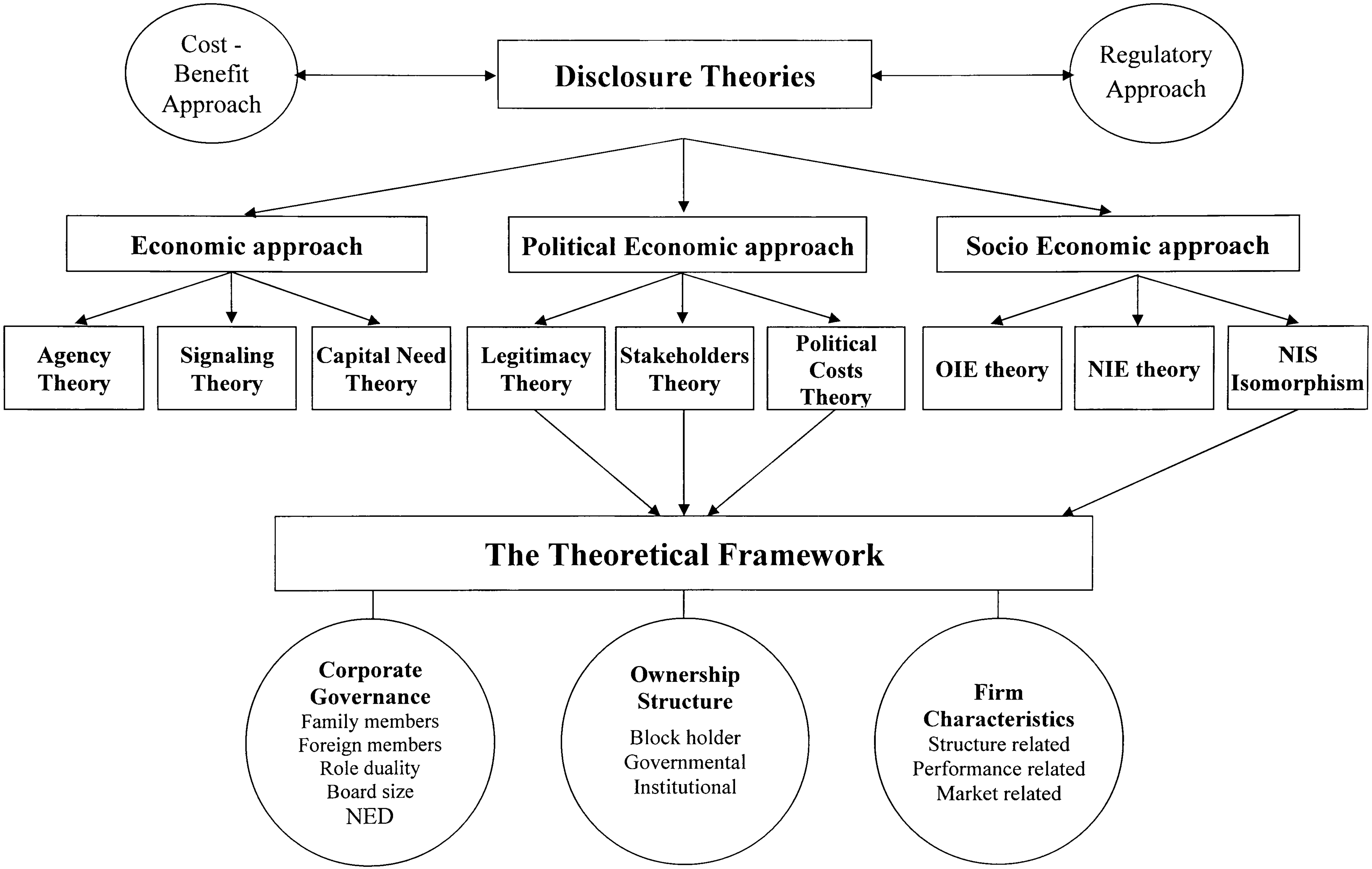
It is commonly agreed that companies can gain a variety of benefits from disclosure. Reducing uncertainty about the financial position of companies is one of the main benefits that may be considered as the source of other benefits such as reductions in the cost of capital, agency costs and political costs. Eccles and Mavrinac (1995) examine the perception of three different groups; corporate managers, financial analysts, and portfolio managers; about corporate disclosure. They found that the all three groups ranked increased credibility as the main benefit from improved disclosure. However, the results show that the other potential benefits have received different ranking from the three groups. Other potential benefits include increased share value, increased number of patient investors, increased analyst following, improved access to capital, increased price/earnings ratios, decreased share volatility, increased share liquidity, improved relations with supplier, and reduced political regulatory intervention.

Vlachos (2001) classifies benefits from disclosure into two categories, internal benefits and external benefits. The former includes reduction in the company's cost of capital, reduction in agency costs, reduction in political costs, and other benefits such as; enhance corporate reputation and public image, allay the fears of investors and lenders about repayment obligations, and stability in share prices. On the other hand, external benefits include increase in business investment, efficiency in capital markets, and enhanced liquidity of capital markets. Gray and Roberts (1989) present ranking for factors that constrain and benefit voluntary information disclosure according to their empirical results. While the first rank of constraining factors was given to cost of competitive disadvantage, improved image/reputation of company was the first of factors benefiting voluntary disclosure. It may be helpful to indicate that there is agreement between studies about the main benefits of disclosure but there is variation about the ranking of these benefits. The reason for this variation may be the variation of respondents groups and the differences in the economic circumstances in the year when studies were conducted.

At the end of this part, it can be noticed that most of the benefit of disclosure are the reduction in indirect costs. That may be because most of indirect costs are opportunity costs. In this regard, it may be helpful to emphasize that it is difficult to measure indirect costs and benefits of disclosure in terms of monetary units.

Having discussed the most common theories in disclosure literature, the next section presents the theoretical framework employed in the current study. It is presented in Figure 4.2.

Figure 4-2 The theoretical framework



4.7 Summary and conclusion

This chapter summarizes the dominant theories that have been used in disclosure literature. The discussion has shown that there is no one theory can fully explain disclosure practices. Moreover, it is clear that there is overlap among these theories. Some of these theories complement each other such as legitimacy theory and political costs theory. Some of them can be regarded as competing theories such as signaling theory and proprietary costs. Moreover, reviewing these theories indicates that each theory takes a look at disclosure from different perspective. While the economic approach focuses on parties related closely with economic activities and assumes that individuals are motivated by economic self interest only, the political economic approach focuses on those parties in addition to governmental agencies and assumes that people are motivated by power and economic self interest. Furthermore, the socioeconomic approach assumes that people are motivated by societal values so it considers all parties inside and outside the company. Nevertheless, it can be noticed that there is overlap between regulatory approach and cost benefit analysis approach on one side and other approaches on the other side.

The current study addresses the voluntary disclosure practices in the annual reports of the most active Egyptian listed companies. The annual report is prepared for general purposes, i.e. it is not directed to a specific user. Therefore it can be used by several stakeholders not only shareholders. Moreover, the study assesses the total voluntary disclosure and its categories; not only one type of voluntary disclosure such as forward looking information or social information. Consequently, the regulatory approach that related more with mandatory disclosure is irrelevant to the study. In addition, the study doesn't focus on the economic consequences of disclosure practices. Therefore cost benefit approach will not be used as a theoretical base of the study.

Moreover, the economic approach that based on assumptions of efficient market, profit maximization and self interest is considered to be not appropriate for the purpose of the current study. Although the inherent limitations of each of legitimacy, stakeholder and political theory, these theories are not competing but overlapping and can complete each other. Therefore it was decided to use the political economy approach as the appropriate theoretical base for the present study. Figure 4-2 shows the theoretical framework of the study.

As indicated in the previous chapter, the context of the current study is Egypt which has a secretive and conservative culture in addition to its own institutions. The study follows the recent trend in disclosure literature, as indicated in chapter two, which considers corporate governance variables among the determinants of disclosure decision. Corporate governance is a recent concept in Egypt and the Egyptian companies may be unfamiliar with it. In this regard institutional theory can play a central role in explaining the extent of voluntary disclosure. As indicated through this chapter, there is overlap between institutional theory and legitimacy theory. As such, the main theories that the current study is based theoretically on are stakeholder theory, legitimacy theory, political costs theory and new institutional sociology theory (See figure 4.2). However, it must be emphasized that choosing these theories does not mean that they have some absolute superiority over other theories. These theories are relevant to the purpose of the present study. To sum up, given the lack of a comprehensive theory and responding to the call for employing a wider theoretical framework; theoretical triangulation or more than one theory, the current study employs the political economic approach and institutional theory; new institutional sociology NIS; as the theoretical base to develop the research hypotheses. The next chapter presents the research methodology while the research hypotheses will be presented in chapter six.

Chapter Five: Research Methodology

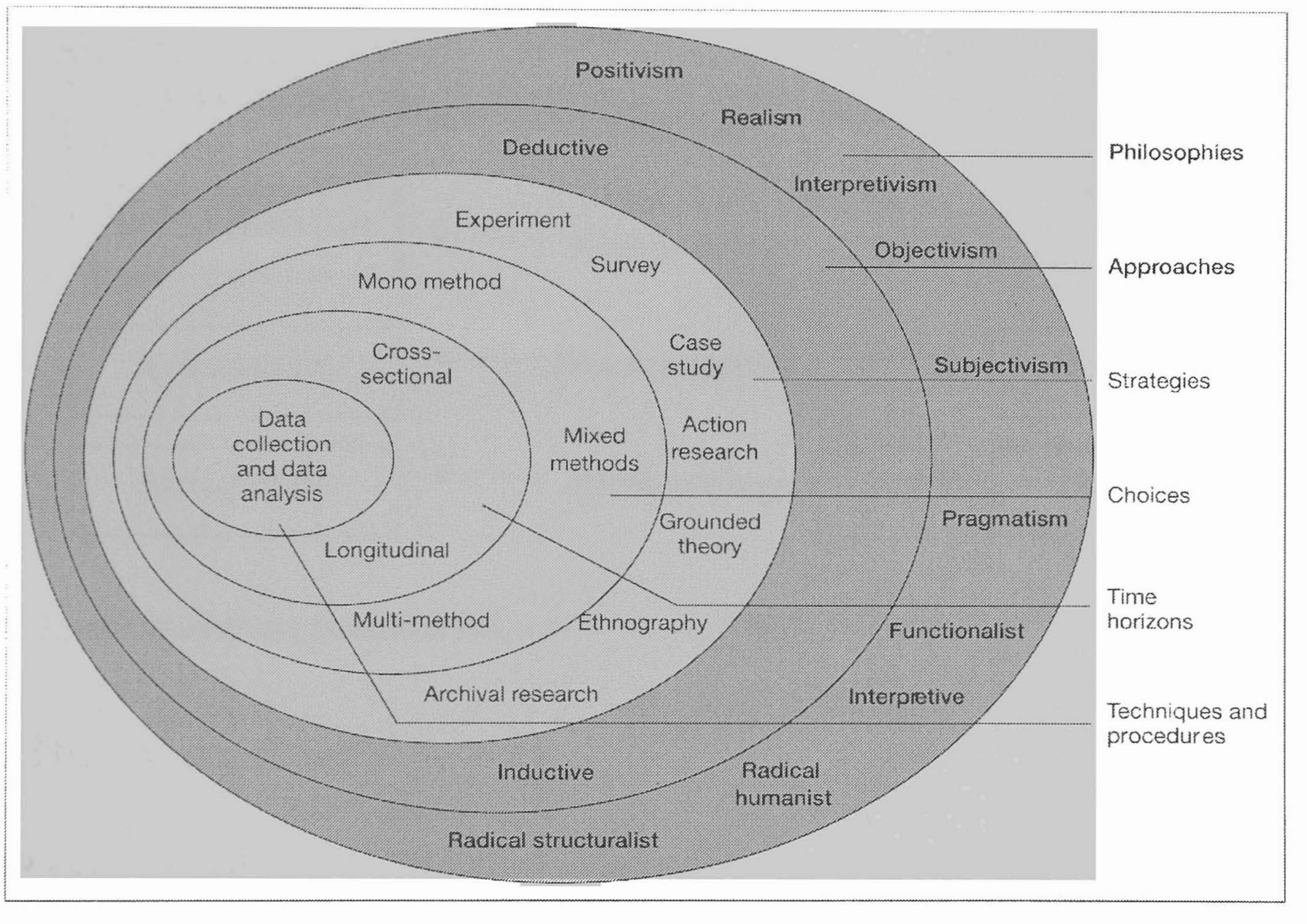
5.1 Introduction

The current study investigates the voluntary disclosure practices in Egyptian capital market as an emerging market. The previous chapters present the theoretical section in this study; reviewing the relevant literature in chapter two, overview of the Egyptian context in chapter three and outline the appropriate theories to the study in chapter four. Based on the proposed theoretical framework and the literature, the empirical section in the present study aims to measure the extent of voluntary disclosure and its trend over the period of study. It aims also to examine the relationship between voluntary disclosure - as dependent variable- and a number of explanatory variables. The current chapter outlines the research method and the procedures employed to carry out the empirical section. Section 5.2 outlines the research philosophy. The research approach is presented in section 5.3. While section 5.4 provides details of the research design, section 5.5 describes the research instrument and the definitions of the independent variables. Statistical methods employed to test the hypotheses are presented in section 5.6, followed by the conclusion in section 5.7.

5.2 Research Philosophy

The research process involves a number of steps or procedures that should be followed to conduct research. Each of these steps requires rational decision making choices. Saunders et al (2007) indicate that the steps of research process can be viewed as layers of a research onion. The research onion consists of six layers namely, research philosophies, approaches, strategies, choices, time horizons, techniques and procedures. Figure 5-1 shows the research onion. There are important layers of the research onion need to be peeled away before deciding about data collection and data analysis. Questions of research method are of secondary importance to questions of ontology, epistemology, and paradigm applicable to the research (Guba and Lincoln, 1994; and Saunders et al, 2007). Based on this classification of the steps of research process, this section sheds light on the first layer of the research onion of the current study; research philosophy. The following sections provide overview of the remaining layers.

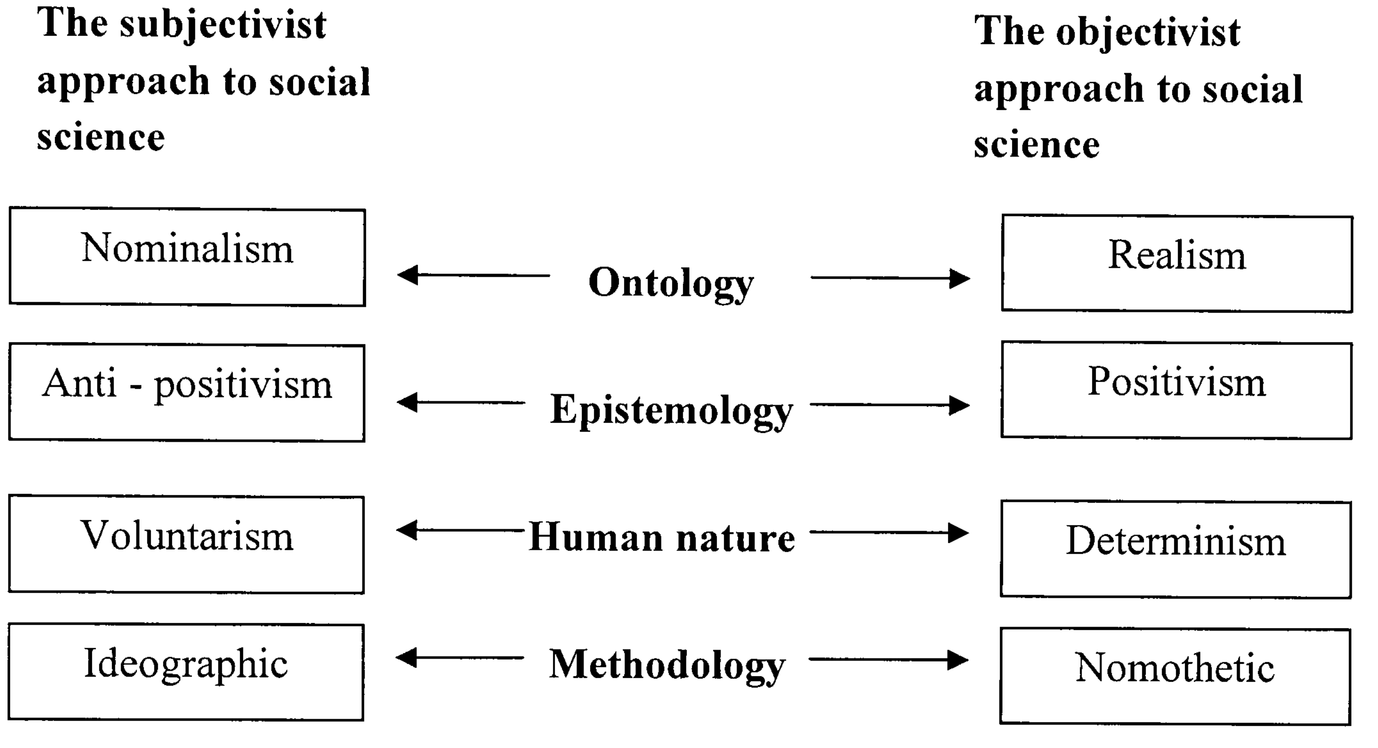
Figure 5-1: The research onion



Source: Saunders et al (2007, p.102)

The term research philosophy relates to the development of knowledge and the nature of that knowledge (Saunders et al, 2007). The research philosophy adopted by researchers contains important assumptions about the way in which they view the world. Research in social science, including accounting, is based on assumptions about the nature of social science and the nature of society. The assumptions about the nature of social science are related to the ontological perspective, epistemology perspective, human nature and methodology. Two extreme positions can be identified on each of these assumptions, based on the subjective and objective dimension. These positions are presented in figure (5-2). The assumptions about the nature of society can be classified in terms of regulation, and radical change dimension. (Burrell and Morgan, 1979)

Figure (5-2) The subjective – objective dimension



Source: Burrell and Morgan (1979, p.3)

5.2.1 The nature of social science

As indicated before, four assumptions are related to the nature of social science; ontology, epistemology, human nature and methodology. As shown in figure (5-2), the subjective – objective dimension can be used to distinguish the extreme positions of each assumption. The first assumption, *Ontology*, concerns with the very essence of the phenomena under investigation. Two contrast positions can be identified, *Nominalism* and *Realism*. While the former considers that the social world external to individual recognition is made up of names, concepts and labels that give a structure to reality, the later involves that this social world is a compound of real, factual and tangible structures. In other words, the question is whether the reality is external to the individual cognition or it is a product of individual cognition. The realists believe that the social world exists independently of an individual's appreciation of it. (Burrell and Morgan, 1979)

The second assumption is *Epistemology* which concerns what constitutes acceptable knowledge: the grounds and the nature of knowledge. In general, two contrasting epistemological positions can be identified, *Anti-positivism* and *Positivism.* Positivist epistemology seeks to explain and predict what happens in the social world; based on the traditional approaches that dominate the natural sciences; by searching for regularities and causal relationships between its constituent elements (Burrell and Morgan, 1979). On the other hand, A*nti-positivism* is an epistemology that advocates that it is necessary for the researcher to understand the differences between humans as social actors. Anti–positivists argue that generalisability is not of crucial importance (Bryman and Bell, 2003 and Saunders et al, 2007). Burrell and Morgan (1979: p.5) state that:

> *"For the anti-positivist, the social world is essentially relativistic and can only be understood from the point of view of the individuals who are directly involved in the activities which are to be studied. Anti-positivists reject the standpoint of the 'observer', which characterises positive epistemology, as a valid vantage point for understanding human activities. They maintain that one can only 'understand' by occupying the frame of reference of the participant in action. One has to understand from the inside rather than the outside. From this point of view social science is seen as being essentially a subjective rather than an objective enterprise. Anti – positivists tend to reject the notion that science can generate objective knowledge of any kind"*

The third assumption is related to the human nature debate that concerns with the relationship between human beings and their environment. The two extreme positions in these debate are *voluntarism* and *determinism.* Under the former position, humans are completely autonomous and free willed. On the other hand, determinist view postulates that humans and their activities are completely determined by the situation or environment in which they are located.

The last assumption is related to the methodology debate which concerns with the methods used to investigate and learn about the social world. *Ideographic* and *Nomothetic* are the contrast positions in this debate. The ideographic approach assumes that one can only understand the social world by obtaining first hand knowledge of the subject under investigation. It implies the analysis of the subjective accounts that one generates by participating or getting inside the situations. On the contrary, the nomothetic approach emphasizes the importance of basing research upon systematic protocol and technique and involves a rigorous and scientific testing of the hypotheses. (Burrell and Morgan, 1979 and Riahi-Belkaoui, 2002)

5.2.2 The nature of society

There are two contrast positions related to the nature of society; the sociology of radical change and the sociology of regulation. The former focuses on radical change to explain society. "*it looks towards potentiality as much as actuality; it is concerned with what is possible rather than with what is; with alternatives rather than with acceptance of the status quo*" (Burrell and Morgan, 1979, p.17). On the other hand, the sociology of regulation seeks to explain society in terms of its unity and cohesiveness. It concerns with the need for regulation in human affairs and asks why the society is maintained as an entity and tends to hold together; order and stability. Contrast to the radical change, the sociology of regulation concerns with the actuality and the status quo.

Saunders et al (2007) indicate that the radical change in the area of business and management adopts a critical perspective on organisational life. It relates to a judgment about the way organisational affairs should be conducted and suggests ways in which these affairs may be conducted in order to make fundamental changes to the normal order of things. On the other hand, the regulatory perspective is less judgmental and critical. They state that:

> "*Regulation seeks to explain the way in which organisational affairs are regulated and offer suggestions as to how they may be improved within the framework of the way things are done at present. In other words, the radical change dimension approaches organisational problems from the viewpoint of overturning the existing state of affairs; the regulatory dimension seeks to work within the existing state of affairs*"(p.112).

5.2.3 Research paradigm

Based on the two dimensions; the subjective – objective dimension and regulation, and radical change dimension; Burrell and Morgan (1979) distinguish between four research paradigms for the analysis of social theory; Radical humanist, Radical structuralist, Interpretive, and Functionalist. Figure (5-3) shows the four research paradigms. These paradigms can be used to differentiate between four visions of accounting research (Riahi-Belkaoui, 2002).

The radical humanist paradigm represents the subjective and radical change standpoints. Based on the above discussion, this paradigm adopts a critical perspective on organisational life and is concerned with changing the status. In addition it implies the subjectivist approach of social science; nominalism, anti-positivism, voluntarism and ideographic. On the other hand the radical structuralist paradigm tends to the objectivist approach to social science; realism, positivism, determinism, and nomothetic. However, it shares the radical humanist paradigm in seeking for fundamental change to the existing state. The current study is concerned with the status quo of the voluntary disclosure practices in the annual reports of the most active Egyptian listed companies. It is not concerned with achieving fundamental change. Therefore the radical humanist and radical structuralist paradigms are considered to be irrelevant to the current study.

Figure 5-3 Four paradigms for the analysis of social theory

The sociology of radical change

Subjective	Radical humanist	Radical structuralist	**Objective**
	Interpretive	Functionalist	

The sociology of regulation

Source: Burrell and Morgan, 1979, p.22

The interpretive paradigm represents the regulatory approach which seeks to explain the social order; organisational affairs; and offers suggestions for improvement by discovering irrationalities. Its concern is to understand and explain what is going on not to achieve change. However, this paradigm tends to the subjectivist approach of social science; the nomalist, anti-positivist, voluntarist and ideological positions.

In accounting it would aim to understand the subjective experience of individuals involved in the preparation, communication, verification, or use of accounting information. However, the interpretive paradigm suffers from a number of limitations; it postulates that an observer can understand social action through sheer subjectivity and without interference; it fails to be an inquiry of change; and it creates the illusion of pure theory by using a monological line of reasoning (Riahi-Belkaoui, 2002).

The functionalist paradigm represents the regulatory standpoint and the objectivist approach. This paradigm aims to explain the existing state of social order, the facts and causes of the social phenomena. The key assumption the researchers would be making under this paradigm is that organisations are rational entities, in which rational explanations offer solutions to rational problems. (Saunders et al, 2007) In this regard, the functionalist paradigm is considered often to be problem-oriented in approach, concerned to provide practical solutions to practical problems (Burrell and Morgan, 1979). Riahi-Belkaoui (2002) states that:

> "*The functionalist view in accounting focuses on explaining the social order, in which accounting plays a role, from a realist, positivist, determinist and nomothetic standpoint. It is concerned with effective regulation on the basis of objective evidence*" (p.259)

The functionalist paradigm is the dominant paradigm in the business and management research (Saunders et al, 2007). In accounting context, Riahi-Belkaoui (2002) indicates that the functionalist view characterizes what is generally considered as mainstream accounting research. Its main assumptions include the separation between theory and observations that used to test the theory, employing the hypothetic - deductive approach and quantitative methods in collecting and data analysis.

However, a number of authors point out that a uniquely correct perspective can not exist. They criticize the classification of the four paradigms as separate and mutually exclusive domains and highlight the difficulty of identifying where one paradigm ends and another begins. Therefore they argue that a multiple perspectives, a pluralistic, view becomes a necessity for achieving any sort of comprehensive view. (See Brochner, 1985; Gioia and Pitre 1990; and Jackson, 1999)

According to Gioia and Pitre (1990), transition zones can be seen between the four paradigms. Due to the blurred nature of these transition zones, it is possible to construct bridges that link apparently disparate concepts together in these zones. As such these transition zones constitute multiparadigm approaches. They state that "multiparadigm approaches offer the possibility of creating fresh insights because they start from different ontological and epistemological assumptions and therefore can tap different facets of organizational phenomena and can produce markedly different and uniquely informative theoretical views of events under study" (p.591). Figure 5-4 presents the transition zones (shaded areas) between the four paradigms.

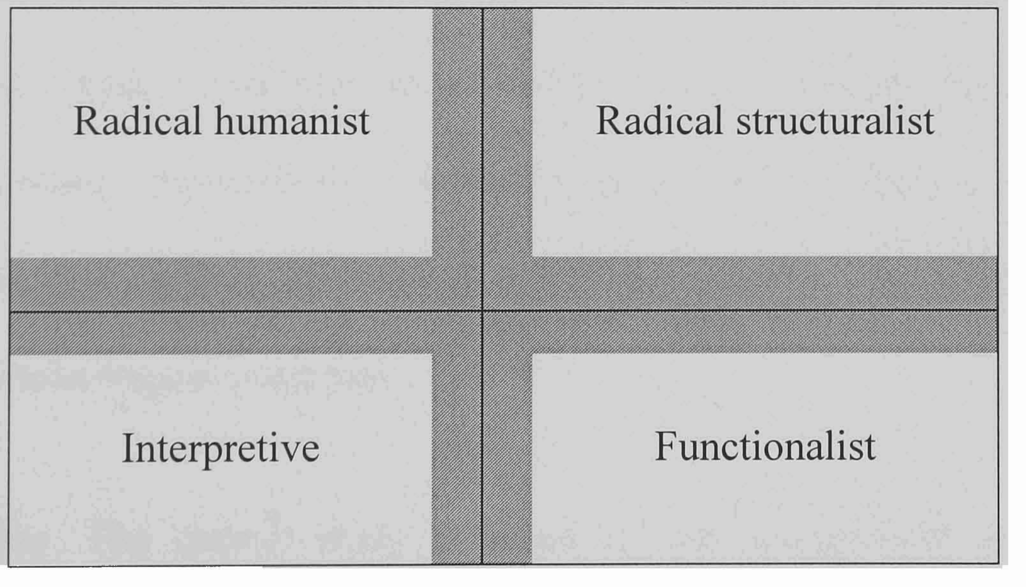
The current study aims to address the voluntary disclosure practices by the most active Egyptian listed companies in their annual reports. It tries to provide understanding and rational explanation of the status quo of such practices. In addition it aims to explain the variation in the extent of voluntary disclosure by a number of potential determinants. Specifically it investigates the association between voluntary disclosure and three groups of determinants; corporate governance characteristics, ownership structure, and firm characteristics. Therefore, the transition zones with radical humanist and radical structuralist that share the value for activism and change (Gioia and Pitre, 1990), are considered to be irrelevant to the purposes of the study. On the other hand the transition zone that links both of interpretivist and functionalist paradigms provides an opportunity to benefit from the wider theoretical framework indicated in chapter four. Moreover, it allows for providing a descriptive analysis to voluntary disclosure practices by Egyptian listed companies that lack prior studies. Chapter seven will present this analysis to answer the first two research questions. Furthermore, the interpretivist – functionalist transition zone allows also to use the deductive approach to develop and test the research hypotheses to answer the third research question (see chapter eight).

Therefore and based on the above discussion, it was decided that the interpretivist – functionalist transition zone as a multiparadigm approach is the suitable research philosophy to the current study. The following sections outline the research approach and research design.

Figure 5-4 The transition zones between the Burrell and Morgan's four paradigms

The sociology of radical change

Subjective



Objective

The sociology of regulation

Source: adapted from Gioia and Pitre (1990): the shaded areas represent the blurred transition zones

5.3 Research approach

The second layer in the research onion according to Saunders et al (2007) is the research approach. In general, there are two main research approaches to choose: the deductive approach and the inductive approach. Deduction is "*the process by which we arrive at a reasoned conclusion by logical generalization of a known fact*" On the other hand Induction is "*a process where we observe certain phenomena and on this basis arrive at conclusions*" (Sekaran, 2003, p.27). In other words the deductive approach is moving; or start; from a theory, the hypothesis is developed based on this theory and then a research strategy is designed to test this hypothesis; using data collected. On the other hand, under the inductive approach data is collected and analyzed and then a theory is developed as a result of the conclusion from data analysis (See: Bryman and Bell, 2003; Sekaran, 2003).

Saunders et al (2007) indicate that deduction owes more to positivism and induction to interpretivism / anti positivism. In addition, Bryman and Bell (2003) indicate that deductive approach; testing of theory; is related to quantitative research that follow objectivism/ realism and positivism as ontological and epistemological positions respectively. In contrast, the inductive approach; generation of theory; is related to qualitative research that follow Constructionism / Nominalism and interpretivism as ontological and epistemological positions.

As mentioned earlier, The current study is based on the interpretivist – functionalist transition zone. It doesn't aim to develop a theory but it seeks to describe the voluntary disclosure practices in the annual reports and to investigate the relationship between the extent of such disclosure and a number of determinant variables. Therefore, the deductive approach is considered to be more suitable to the present study. the deductive approach has been employed heavily in the disclosure literature (for example, Haniffa and Cooke, 2002;

Eng and Mak, 2003, Ghazali and Weetman, 2006, and Barako et al, 2006). This approach involves five sequential stages: These deducing a hypothesis from the theory; expressing the hypothesis in operational terms; testing the operational hypothesis; examining the specific outcome of the inquiry (confirms the theory or indicates the need for modification); and finally modifying the theory, if necessary (Saunders et al, 2007).

Based on the theoretical framework presented in chapter four – in addition to the evidence from previous disclosure studies reviewed in chapter two and the features of the Egyptian business environment outlined in chapter three – the current study developed a number of hypotheses that will be tested using the research design and the empirical data. The following section presents an overview of the research design.

5.4 Research design

The purpose of the study, the unit of analysis, sampling design, and time horizon are examples of the choices related to research design. Descriptive studies are undertaken to understand the characteristics of organizations that follow certain common practices (see Sekaran, 2003).

The purpose of the current study is twofold; to investigate the level of voluntary disclosure, its content and trend over the period of study, and to identify its determinants. The first objective of the study is to look into the voluntary disclosure practices in the annual reports of the most active non financial listed companies over a period that witnessed issuing the Egyptian corporate governance code for the first time. The study investigates voluntary disclosure practices (what is the extent and how it evolves over time). Moreover, the study aims to identify the determinants of voluntary disclosure in the Egyptian context. This will be done by formulating and testing a number of hypotheses in the empirical section; as a deductive approach. The study follows the recent direction in disclosure literature that extends the potential determinants to include corporate governance characteristics beside firm characteristics and ownership aspects.

As such, the current study follows the positive accounting theory (PAT) that seeks to determine a theory that explains "what is" rather than "what should be" and to determine the various factors that may influence rational factors in the accounting field. (Watts and Zimmerman, 1986; and Riahi-Belkaoui, 2002)

The current study is a single country study; it focuses on the voluntary disclosure practice in the annual reports of the Egyptian listed companies. As indicated in chapter two, the majority of single country disclosure studies employ cross sectional analysis and focus on the disclosure practice in a specific point of time (one year) (for example, Haniffa and Cooke, 2002; Eng and Mak,2003, Ghazali and Weetman, 2006). A few studies address the voluntary disclosure practices over a period of time (such as Barako et al 2006, Hassan et al, 2006). The present study is considered to be a longitudinal study; it examines voluntary disclosure practice over a period of time using up to date data; the recent years at the time of conducting the study. In other words, we use panel data analysis to benefit from the cross sectional and time series analyses. The reason for this is to investigate whether the total and the categories of voluntary disclosure practices differ over years. Furthermore, it will help in determining the significant variables that explain the variation in the extent of total and categories of voluntary disclosure among the investigated companies. This type of analysis is helpful to all parties interested in financial reporting especially in emerging capital markets and developing countries. It provides a diagnostic view of the information disclosed voluntarily in the annual reports and may help in improving the mandatory disclosure requirements (Dye, 1986). It sheds light on the aspects or types of information that may need more disclosure and more attention from the capital market authority.

The unit of analysis refers to the level of aggregation of the data collected during the subsequent data analysis stage (Sekaran, 2003). The most active Egyptian listed companies are used as the unit of analysis in the present study. These most active companies are chosen for some logical and practical reasons. The most active companies are more likely to disclose more information voluntarily and to apply the best practice of corporate governance. These companies are assumed to be more readily attracting the interest of investors and other stakeholders and more willing to volunteer to disclose additional information (Eng and Teo, 1999; and Ghazali and Weetman, 2006). Moreover, these companies constitute the main driver for the Egyptian stock exchange and play an important role in the economic reform programme and the recent initiative of corporate governance (See: Abdel-Shahid, 2003). In addition, the required data about these companies is more available than non active companies.

As such, the sampling design in the current study is judgement sampling that involves the choice of subjects who are most advantageously placed or in the best position to provide the information required. Generally, this type of sampling design is used when a limited number or category of people have the information that is sought. In such cases, any type of probability sampling across a cross-section of the entire population is purposeless and not useful (Sekaran, 2003, and Blumberg et al. 2005).

> *"Judgement sampling, though restricted in generalizability, may sometimes be the best sampling design choice, especially when there is a limited population that can supply the information needed." (Sekaran, 2003, p.279)*

In Egypt, the concept of corporate governance is relatively new. Although all listed companies are encouraged to follow the best practice of corporate governance, corporate governance principles are expected to be applied in the most active companies, especially in the first years of local code. The Egyptian corporate governance code (See appendix 2) recognizes this issue and states that

> *"Guidelines are to be primarily implemented in joint-stock companies listed on the stock exchange, especially those undergoing active trading operations" (P.5)*

Therefore, the sample population in the current study was decided to be the active companies in Cairo and Alexandria Stock Exchange. Since 2003, the CASE issues the annual disclosure book of the most active companies which contains information about the fifty most active companies in the Egyptian stock exchange according to trading value. Four issues are available at the time of conducting the current study.

The period examined in the current study covers four years from 2003 to 2006. One of the reasons for choosing this time period is to study how voluntary disclosure practices evolve over a recent period of time with no changes in mandatory disclosure requirements. As indicated in chapter three, the last change in mandatory disclosure requirements was in 2002, the new listing rules. Other reasons include the increasing awareness of corporate governance and transparency and the new initiatives in the Egyptian capital market over this period, establishing the Egyptian institute of directors in 2003 and issuing the Egyptian code of corporate governance in 2005, not mandatory. In addition, the examination of the annual reports for the year 2006 provides chance to assess the effect of issuing the Egyptian code of corporate governance, 2005, on the extent of voluntary disclosure.

To carry out the empirical section and test the hypotheses of the current study, the annual reports of the most active companies in Cairo & Alexandria Stock Exchange (CASE) in each of the four years have been set as a target. These companies were identified according to the disclosure books published by the Cairo & Alexandria Stock Exchange (CASE) which include the fifty most active companies.

The top 50 Companies represent a considerable portion of the Egyptian capital market activity. These companies constitute about 60%, 64% and, 70% of the Egyptian market capitalization in 2004, 2005 and 2006 respectively. Moreover, these companies represent 73% of trading volume and trading value for the financial year 2005. In 2006, the 50 most active companies represent 81% of trading value and volume. Table 5.1 provides summary for the trading aggregate for the 50 most active companies. Moreover, the top 30 Companies represent 81% of the traded value amount in 2005. (CASE, 2005)

Data collection There are different sources of data related to the Egyptian listed companies. These sources include Capital Market Authority (CMA), Cairo and Alexandria Stock Exchange (CASE), Egypt for Information Dissemination (EGID), Misr for Clearing, Depository and Central Registry, Central Bank of Egypt, Information and Decision Support Centre (IDSC), Central Auditing Organization (CAO), Fiani and Partners Company and the listed companies themselves. To carry out the empirical section of the current study, annual reports of target companies are required to be collected to assess the extent of voluntary disclosure (the dependent variable). We mean by annual report the financial statements; balance sheet, income statement, cash flow statement, changes in owners' equity; notes, auditor report and the report of board of directors. Not all of the mentioned sources provide the complete annual reports, most of them provide summary of the financial statements and some financial ratios and historical data. The most relevant sources for the required data are companies themselves and the CMA. However, all listed companies are required to submit their annual reports to the capital market authority which is responsible for checking these annual reports and has the right to force the listed companies to amend their annual reports to comply with the disclosure requirements. These annual reports are filed with the Capital Market Authority (CMA); the department of electronic archive in CMA scans the whole annual reports. Consequently, Capital Market Authority (CMA) is considered to be the most suitable source for annual reports of listed companies. Previous disclosure studies in Egypt use CMA as the main source for annual reports (e.g. Abd-Elsalam, 1999; and Hassan *et al.*, 2006).

The total number of companies included in the four disclosure books is 77 companies; 13 are financial companies and 64 non-financial companies. Following the majority of disclosure literature (e.g. Cooke,1989, Wallace et al.; 1994; Wallace and Naser, 1995; Haniffa and Cooke, 2002; Ghazali and Weetman, 2006) financial companies; e.g. banks, insurance companies, and leasing companies; were excluded from the sample due to the different requirements of disclosure and corporate governance. Hence their annual reports may be not comparable to those of other companies. Table 5.2 presents the total number of investigated companies. However, the most active companies differ from year to year due to merger, new listing, delisting, and the trading activity. To get more understanding to the discretionary disclosure policy, it was decided to collect the four annual reports of each of non financial companies included in any of the four issues of disclosure book. The researcher has contacted CMA asking for the annual reports of the most active non financial companies for years from 2003 to 2006.

Table 5-1 Trading aggregates for the 50 most active companies

	Trading Value (LE billion)		Trading Volume (Million Shares)		Market Capitalization (LE billion)	
	2005	2006	2005	2006	2005	2006
50 most active companies	103	211	3075	6290	291	374
Total Market (Stocks)	142	260	4190	7745	456	534
50 most active companies as % of Total market	**73%**	**81%**	**73%**	**81%**	**64%**	**70%**

Source: CASE, annual report (2006)

Table 5.2 Selection of companies

The most active companies in disclosure books	No.
Total number of companies	**77**
(-) Number of financial companies	**13**
Total number of non financial companies	**64**

* Source: The disclosure books, CASE

A number of collected annual reports were incomplete; some without the report of board of directors or contain just a summary of this report, and others without notes. So it was decided to exclude these incomplete annual reports. Hence, a total of 182 annual reports were complete and useable to carry out the empirical section of the current study. These 182 firm - year observations cover the four years; 46, 45, 46 and 45 observations for the four years 2003, 2004, 2005 and 2006 respectively. The sample include 27 companies with four observations, 11 companies with three observations, 15 companies with two observations and 11 companies with one observations. Table 5.3 shows the total number of company – year observations examined in the current study while table 5.4 shows the sector representation of selected companies. As such the final sample consists of 64 non-financial companies, with 182 observations, which span 15 different sectors.

Table 5.3 Total number of company-year observations

	2003	2004	2005	2006	Total observations
The most active Companies	50	50	50	50	200
(-) Financial Companies	7	9	10	11	37
Non-financial Companies	43	41	40	39	163
Total investigated observations	**46**	**45**	**46**	**45**	**182**

Table 5.4 Sector representation of selected companies

Sector	No. of Co.					%
	2003	**2004**	**2005**	**2006**	**Total**	
Building Materials & Const.	12	12	10	9	43	23.63
Chemicals.	4	4	5	5	18	9.89
Communications Industry.	3	3	3	3	12	6.59
Electrical Equipment & Eng.	2	2	1	2	7	3.85
Entertainment.	3	2	2	2	9	4.95
Food & Beverage.	4	3	5	4	16	8.79
Health & Pharmaceuticals.	2	2	2	2	8	4.40
Housing & Real Estate.	5	5	6	6	22	12.09
Media.	1	1	1	1	4	2.20
Mills & Storage.	4	5	2	1	12	6.59
Mining & Gas.	1	1	2	2	6	3.30
Textiles & Clothing.	3	4	5	6	18	9.89
Others: Utilities, Retails &, In. Tech.	2	1	2	2	7	3.85
Total	**46**	**45**	**46**	**45**	**182**	**100**

Comparing with previous studies, Ghazali and Weetman (2006) use sample of 87 annual reports of Malaysian companies; Cheng and Courtenay (2006) 104 companies in Singapore; Tsamenyi et al (2007) use sample of 22 companies in Ghana and Agca and Onder (2007) address 51 listed companies from Turkey.

The prior studies in Egyptian context use several number of companies, Omran and Ragab (2002) 46 companies; Hassan et al (2006) 77 companies; Abd-Elsalam and Weetman (2007) 72 companies, and Rizk et al (2008) 60 companies.

Corporate governance data and ownership structure data have been collected from Egypt for Information Dissemination (EGID) and the four disclosure books issued by the CASE. EGID is an information provider which was established in June 1999 as a private and fully owned subsidiary of the CASE.

5.5 Variables and research instrument

This section presents the variables considered in the current study and the measures used to capture these variables. The dependent variable in this study is the extent of total voluntary disclosure in corporate annual reports (TVDS). The following paragraphs justify and outline the research instrument; disclosure index; used in the current study to measure the dependent variable. Then the definitions and measurement of independent variables will be presented.

5.5.1 measuring the extent of disclosure: overview

The terms of disclosure and transparency have been widely used in the business environment due to their increasing importance to a broad range of corporate stakeholders. In this regard, it is widely accepted that the corporate annual report is the main disclosure vehicle and an important source of information for stakeholders especially in developing countries (Cooke, 1991; Hossain and Adams, 1994; Botosan, 1997; Marston and Chrives, 1991; Ho and Wong, 2001; Hooks et al, 2000). As indicated in chapter two, a large number of disclosure studies have addressed the disclosure practices; mandatory and voluntary; in corporate annual reports (e.g. Cooke, 1989; Cooke, 1991; Wallace and Naser, 1995, Barako et al.; 2006; and Wang et al.; 2008).

Gray and Haslam (1990) report that there is "*no one single, agreed framework within which to conceptualise, articulate and collect empirical evidence about the external reporting activity of organisations" (P.53)* Consequently, they suggest the content analysis approach to make a systematic enquiry into the contents of annual reports. To develop such theoretical concept and operational measure of the extent of disclosure, Patton and Zelenka (1997) suggest four possible approaches as follow:

- Evaluating the extent and quality of a company's disclosed information based on the decision usefulness of information items as determined by a normative decision model,
- Evaluating a company's quality of disclosure based on a group of knowledgeable analysts' evaluation of the annual report,
- Assessing the extent of the market reaction to the disclosure of information, and
- Assessing the Extent of compliance with a set of legal or GAAP requirements.

They indicate that the first three approaches are problematic because there isn't any generally accepted valuation model for the first approach, the probability of the bias of analysts for the second and irresolvable issues in selecting "an event window" for the analysis. So, they prefer to adopt the fourth approach which is more related to mandatory disclosure.

However, three approaches can be used under content analysis, depending on who is involved. The first is the sender approach; asking managers or prepares for a self evaluation of corporate disclosure. The second is the receiver approach; asking financial analysts and other agents for an evaluation. The third is the third party approach, performing content analysis by someone who is neither addresser nor addressee (Gruning, 2007).

It can be argued that the sender approach is not feasible especially in the context of voluntary disclosure. However, it may be helpful in other context such as mandatory disclosure. The other two approaches have been used in disclosure literature. Examples of accounting studies that use the receiver approach include Botosan and Plumlee, 2002; Hope 2003, Bushman et al. 2004, Cheng and Courtenay, 2006. The common analysts ratings used in this approach include The Association for Investment Management and Research (AIMR), the Centre for International Financial Analysis and Research (CIFAR), and the Standard and Poor's Transparency and Disclosure Rating (Gruning, 2007).

However, Botosan (1997) indicates that the analysts ratings; e.g. AIMR and CIFAR; tend to be limited to the largest most heavily followed firms in an industry. Moreover, Luo et al. (2006) point out that such ratings are considered to be noisy proxies for voluntary disclosure because they represent analysts' perception of total disclosure. Due to the criticism of the receiver approach, most of disclosure literature used the third approach. The disclosure index, as a third party approach, is the dominant method to assess the extent of corporate disclosure (Gruning, 2007).

For the purpose of analyzing companies annual reports, Beattie et al. (2004) indicate that content analysis can be done as a manual analysis or computerised analysis. In this regard, computerized or automated content analysis provides opportunity to investigate large samples and to save time and cost. In addition, it has better reliability and validity and may replace the disclosure index in the future (Gruning, 2007). A number of previous studies have employed such approach, for example, Hussainey, 2004; Aljifiry and Hussainey, 2007.

On the other hand, using computerized content analysis may reduce the subjectivity but doesn't remove it. The researcher still has to prepare a list of terms and synonyms that may be used. However, the most important point may be the extent of improvement that this method provides over the results of manual content analysis. In addition, this approach requires the availability of annual reports; or the mean of disclosure; in the same language; English in most cases. This is not the case in many countries.

The current study investigates the extent of voluntary disclosure in the annual reports of the most active Egyptian listed companies. Based on the above discussion, the analysts' ratings will not be employed in the present study because such ratings are not available in the Egyptian context. Moreover, the majority of Egyptian listed companies prepare their annual reports in the Arabic language. Therefore using the computerised or automated analysis is unrealistic. Consequently, the manual analysis using disclosure index; self constructed disclosure checklist; is the relevant method to the current study. The following paragraphs outline what we mean by a disclosure index and how to construct it.

5.5.2 Disclosure index:

As indicated previously, one of the research instruments that have been used in prior disclosure studies is the disclosure index which has been used heavily in the literature after Cerf's study in 1961(Marston and Chrives, 1991; Hussainey, 2004). The researchers have used disclosure indices to assess, compare and explain differences in the amount of information disclosed in corporate annual reports.

Coy and Dixon (2004) point out that a disclosure index is commonly applied in accounting research, particularly in studies that examine annual reports; it is being used to provide a single figure summary indicator either of the entire contents of reports of comparable organizations or of particular aspects of interest such as voluntary disclosure and environmental disclosures.

> *'An index comprises numbers that encapsulate, in single figures, objects in the set that one wants to measure and that are capable of measurement. Each number in a valid and reliable index is reached uniformly by determining scores for each of, possibly, many component items, which have been identified as relevant to the set and the purposes of the index. This component- item scores are then combined in a meaningful way in order to ascertain the index number for each object in the set'. (Coy and Dixon 2004, p.82)*

Disclosure studies that employ disclosure index can be classified based on the extent of content analysis into two types: a partial content analysis and a holistic content analysis. In a partial content analysis, researchers identify a list of disclosure topics, while in holistic content analysis researchers investigate the whole annual report to construct their disclosure index (Beattie et al. 2001 and Hussainey, 2004). The current study focuses on the whole annual report to measure the level of voluntary disclosure. The disclosure index is a ratio of the actual disclosure scores awarded to a company to the maximum possible disclosure required or expected (Cooke, 1989 and Hodgdon, 2004).

How to construct disclosure index?

In order to construct a disclosure index, there are three steps must be taken. The first is developing a checklist or scoring sheet; by selecting informational items to be included in this checklist. The second is to score the items and the third is to compute the disclosure index. The three steps involve some practical problems that may affect the reliability and validity of the disclosure index e.g. using partial scores, weighted scores, and scoring inapplicable items (Marston and Shrives, 1991). The following paragraphs deal with these steps.

1) Developing the checklist:

The first and important step is the selection of items that might be expected to be reported in corporate annual reports. However, Wallace (1988) indicates that there is no general theory on the items that should be selected to assess the extent of disclosure. Moreover, the relevant literature shows that there is no commonly used theory to determine the number and selection of items for a disclosure index (Hooks et al 2000). As indicated in chapter two, the content of and number of items in a disclosure index have varied from one study to another. The selection depends on the focus of the research (Wallace and Naser 1995). The majority of disclosure studies base their selection of items on many sources such as previous studies, laws and regulations, recommendations from specialised professional organisation, and comments from the users of annual reports.

The present study follows the prior disclosure studies and develops self constructed voluntary disclosure index to measure the extent of voluntary disclosure in annual reports of the most active non financial Egyptian listed companies. To develop the checklist a number of steps have been taken as follow:

- It starts with preparing a preliminary checklist that contains the expected voluntary information items. The literature concerning voluntary disclosure in corporate annual reports and voluntary items recommended for disclosure by professional organizations are used to develop such checklist. As indicated in chapter two, there was lack of prior studies about the voluntary disclosure practices in the Egyptian context at the time of conducting the current study, except Hassan et al (2006). While the previous disclosure studies in the Egyptian context focus on mandatory disclosure. Hassan et al (2006) address mandatory and voluntary disclosure using checklists developed from the checklist of CMA and CIFAR. However, their checklist of voluntary disclosure; 26 items; includes mandatory items that show volatility in disclosure over time (See section 2.6). As such the preliminary checklist was mainly developed based on the prior voluntary disclosure studies; especially in emerging capital markets and developing countries.
- To ensure that the preliminary checklist includes only voluntary disclosure items, it is reviewed against the mandatory disclosure requirements in accounting standards, company act and other laws, in addition to the listing rules in the Egyptian capital market.
- Since the current study covers four years the attention has been paid to any new requirement during the examined period to ensure that the checklist is relevant to the four years. The main feature was the issuing of Egyptian code of corporate governance which is considered as guidance not mandatory and does not follow the rule of comply or explain (See chapter three).
- As one of the steps used to achieve the validity of the research instrument, three Egyptian academics have been asked to refine the preliminary checklist, two of

them have auditing experience with Egyptian listed companies. The reliability and validity of the research instrument will be presented in more details in section 7.2.

- Additionally to ensure that the final checklist includes the voluntary items that are important and relevant to the Egyptian environment, the checklist was then updated following a pilot study of annual reports of ten companies for the first and last year of the examined period, 2003 and 2006. These ten companies were selected randomly from different sectors in the sample population, the most active non financial companies[1].

The final checklist consists of 46 voluntary information items. Appendix 5.1 presents the final checklist and examples of prior studies that used the selected items. Comparing with the prior voluntary disclosure studies, the number of items is considered to be reasonable. For example, checklist of 30 voluntary items were used to assess the extent of voluntary disclosure in Switzerland (Raffournier, 1995); 46 voluntary items in Singapore (Eng and Mak, 2003); 20 voluntary items in Saudi Arabia (Alsaeed, 2006); 43 information items in Hong Kong (Gul and Leung, 2004); 53 voluntary items to in Malaysia (Ghazali and Weetman, 2006); and 36 information items in Ghana (Tsamenyi et al, 2007).

As indicated in chapter two, there is some variation in the number, title and components of the categories that constitute the checklist of total voluntary disclosure. For example, information about directors and financial highlight statement. To provide more understanding of the voluntary disclosure practices by Egyptian listed companies, the current study extends the approach of Meek et al (1995) by classifying the final checklist into seven subcategories: general information, financial information, non-financial

[1] Examples of information items removed from the initial checklist include number of employees and bank loans and mortgages. While examples of items added to the initial checklist include presenting annual reports in Arabic and English and significant events calendar.

information, future or projected information, corporate governance information, shareholders information and social responsibility information. In this regard information about board of directors may be more related to the corporate governance disclosure and therefore it was decided to include it in the category of corporate governance disclosure. Because the current study does not focus on a specific user group; stakeholder; or a specific type of information, the balance among the number of items under each category has been kept. Table 5.5 shows the number of items in and the percentage of each sub category to the total voluntary disclosure.

Table 5-5 The categories of voluntary disclosure

Category	**No. of items**	**Percentage %**
General Information	7	15%
Financial information	6	13%
Non financial information	6	13%
Future information	6	13%
Corporate governance information	8	17%
Shareholders information	6	13%
Social responsibility information	7	15%
Total	**46**	**100%**

2) Scoring the items:

To capture levels of disclosures, Cooke (1989) indicates two main approaches of developing a scoring scheme: The first approach which advocated by Copeland and Fredericks (1968) depends on the presentation of information. Under this approach, the researcher mentions the number of words used to describe an item disclosed. So, the scale of disclosure varies between zero and one. Cooke (1989) criticizes such procedure of scoring due to subjectivity in allocation of scores and suggests the second approach; a dichotomous procedure. Under dichotomous procedure, a required disclosure item scores one if it is disclosed, zero if it is not disclosed. However, to avoid any negative effect on the reliability and validity of the disclosure scores, two issues related to scoring process must be considered: weighting the score and inapplicable items. The following paragraphs deal with both of them.

Weighted scores or un-weighted scores? There is a debate about weighting the disclosure scores. While un-weighted approach assumes all disclosure items are equally important, weighted approach assumes that the importance to user groups vary from item to item. Those who advocate the use of the un-weighted scores believe that the subjective weights of user groups will average each other out, some groups will value certain disclosures more and some will value certain disclosures less, resulting in an averaging out of their subjective weights (Cooke, 1989; Hodgdon, 2004). On the other hand, those who advocate the use of the weighted scores believe that the weighted scores help in measuring the quality of disclosure not only the extent of the disclosure. In addition, the weighted scores may help in mitigating the problems of subjectivity. (Botosan, 1997; and Hodgdon, 2004)

However, the current study follows the majority of disclosure studies in using the un-weighted approach. The reasons for adopting this approach are summarized in the following points:

- The importance of each item of information may change over time and among different sectors (Hassan et al., 2006). Therefore, we use un-weighted disclosure index because we study the disclosure practices over four years.
- The subjectivity inherent in weighting process. Chow and Wong-Boren, 1987 indicate that a weighted index suffers from subjectivity. The process of weighting

depends on ratings obtained through a survey and without real economic consequences to the respondents. Therefore, the ratings represent the perceptions of information needs and may not fully reflect the actual use of information items. Un-weighted scores avoid such subjectivity inherent in assessing the relative importance of each disclosure item across all potential groups of information users. (Ferguson et al., 2002)

- Under weighted scores weights are often based on perceptions of investment analysts which is not necessarily reflect the importance of the item to other stakeholders.
- It is assumed that an un-weighted index is most appropriate when the research focus is on stakeholders, rather than specific user groups (Cooke, 1989, Hossain et al., 1995, Wang et al, 2008)
- There is evidence from the literature of substantially identical results of weighted and un-weighted scores when both have been used (e.g. Chow and Wong-Boren, 1987 Adhikari and Tondkar, 1992 and; Wallace and Naser, 1995)
- Spero (1979) provides support for not using weights. He found that attaching weights to disclosure items was irrelevant because companies that disclose more the important items also disclose more the less important items and are thus consistent in their disclosure practices. Therefore, companies would be scored the same way regardless of whether items are weighted or un-weighted (Meek et al.; 1995)
- As shown in chapter two, un-weighted scores have been used in a large number of disclosure studies (e.g., Cooke, 1989; Meek et al.; 1995; Street and Bryant, 2000; Street and Gray, 2001; Chau and Gray, 2002).

- Using un-weighted scores emphasizes the extent of overall disclosure rather than emphasizing particular items (Belkaoui, 1994 as cited in Abdelsalam and Weetman 2007)
- Weighted approach may affect the reliability of disclosure index (Marston and Shrives, 1991).

Inapplicable items. The current study follows Cooke (1989) and employs the dichotomous approach; scoring the item one if it is disclosed and zero if is not disclosed. The dichotomous approach has been employed by the majority of disclosure literature (e.g. Cooke, 1989, 1991; Wallace and Naser, 1995; Haniffa and Cooke, 2002; Leventis and Weetman, 2004; Barako et al 2006 and Ghazali and Weetman 2006). However, not all disclosure items are relevant and applicable to all companies. Scoring inapplicable items means penalizing companies and affects the reliability and validity of the disclosure index. Therefore, companies shouldn't be penalized for non disclosing inapplicable items. In this regard Cooke (1989 and 1991) suggests that the researcher can read the entire annual report to decide whether an item is applicable for a company or not. He recognizes that this procedure introduces an element of subjectivity into this approach but he argued that failure to adopt such procedure would mean that larger more diversified companies would be able and likely to disclose more information.

To avoid any potential bias or penalty, the research follows the prior studies and read the entire annual report to identify any inapplicable items. In this regard reading the collected annual reports of a company helps in making the right judgement and enhancing the reliability and validity of the research instrument. Moreover, to reduce the element of subjectivity in identifying inapplicable items the researcher have contacted Egypt for information dissemination (EGID) and CMA asking for a list of all mergers, acquisitions and disposals from 2000 to 2006. It was noticed that 44 of the 46 items in the final checklist are applicable to all companies. the only two items that were inapplicable to some companies are related to information about mergers, acquisitions and disposals.

Accordingly, the actual total voluntary disclosure (ATVD) score of applicable items for a Company is additive as follows:

t
The c u r $_n$
sd y

Where:

ATVD = actual voluntary disclosure score for a company,

d_i = 1 if item i is disclosed; 0 if item i is not disclosed,

n = number of items.

3) Computing the index:

Having scored the disclosure items, the total voluntary disclosure index can be computed. The total voluntary disclosure index is the ratio of the actual scores awarded to a company (ATVD) to the maximum applicable disclosure score for a company (M).

Therefore, total voluntary disclosure for each company is computed as the following equation:

$$\text{Thei c v}\frac{\text{The}}{\text{g}}$$

Where:

TVDS : total voluntary disclosure score.

M = maximum applicable disclosure score = number of applicable items (≤ 46)

At the end of this section, it may worthy mentioning that the same procedure has been followed to compute the voluntary disclosure score for each of the seven sub categories in the checklist. The following section presents the independent variables in the current study.

5.5.3 Independent variables:

The current study follows the recent direction in disclosure literature of assessing the association between corporate governance and voluntary disclosure. It uses a number of corporate governance characteristics; specially board characteristics; in addition to ownership structure and firm characteristics as explanatory variables of the extent of voluntary disclosure in corporate annual reports. As such the independent variables examined in the current study can be classified into three groups. The first is corporate governance characteristics (board characteristics): board leadership (role duality); board composition (family members on the board, the proportion of non-executive directors, and foreign members on the board); and board size. The second group is the aspects of ownership structure: block holder own ership; government owne rship; a nd institutional ownership. The third group of independent variables is firm characteristics: structure-related variables (firm size and gearing); performance-related variables (profitability and liquidity); and market-related variables (listing status, industry type and audit firm). Table 5-6 summarizes the definition and measurement of the dependent variable and independent variables examined in the current study. The independent variables data was collected from the disclosure book issued by CASE; corporate annual reports; and the financial year book (Kompass Egypt) for each of the four years.

The following model has been employed to examine the association between voluntary disclosure and each of corporate governance, ownership structure, and firm characteristics:

$$\textbf{TVDS} = \beta_0 + \beta_1\,\textbf{Inst} + \beta_2\textbf{Block} + \beta_3\,\textbf{Gov} + \beta_4\,\textbf{Bsize} + \beta_5\textbf{Nexc} + \beta_6\textbf{Rdual} + \beta_7\textbf{Fam} + \beta_8\textbf{Fom} + \beta_9\,\textbf{Atype} + \beta_{10}\textbf{Fsize} + \beta_{11}\textbf{ROE} + \beta_{12}\,\textbf{Gear} + \beta_{13}\textbf{Crosls} + \beta_{14}\textbf{Liq} + \beta_{15}\textbf{Indm} + \varepsilon$$

Table 5-6 Definition and measurement of variables

Variable	Definition	Measurement
Dependent TVDS	Total voluntary disclosure Score	the ratio of the total score awarded to a company to the maximum applicable score that company could obtain
Independent Inst	Institutional ownership	Percentage of equity ownership by banks, insurance companies and other institutional investors
Block	Block holder ownership	Percentage of equity ownership by substantial shareholders (owns $\geq$ 5%)
Gov	Government ownership	Percentage of equity ownership by government
Bsize	Board size	The total number of the members on the board
Nexc	percentage of non executives	Ratio of non-executive directors to the total number of directors on the board.
Rdual	Role duality	1 if CEO is the chairman and 0 if otherwise.
Fam	Family members on the board	1 if there are family members on the board and 0 if otherwise
Fom	Foreign members on the board	1 if there is foreign member on board and 0 if otherwise
Atype	Auditor type	1 if the auditor has a partnership with one of the big four audit firm and 0 if otherwise
Fsize	Firm size	Total assets as at the end of the year
ROE	Return on equity	Net profit after tax / shareholders Equity
Gear	Gearing ratio	Debt / Shareholders equity
Crosls	Cross listing	1 if the company listed in other exchange, 0 if otherwise
Liq	Liquidity	Current assets to current liabilities
Indm	Industry type	1 if the company is manufacturing company, 0 if otherwise

5.6 Statistical Analysis and tests

This section provides an overview of the statistical techniques that will be used to carry out the empirical section. To answer the first two research questions, the next chapter will provide descriptive analysis of the results of the checklist over the four years. It will start with assessing the reliability and validity of disclosure index. The study will analyze the total voluntary disclosure; then the categories of such disclosure and will end with item by item analysis. To test if there is significant difference in the total voluntary disclosure before and after the Egyptian code of corporate governance and also among years, ANOVA and *T* test as parametric tests will be applied. Moreover, non parametric tests; Kruskal – Wallis and Mann Whitney; will be employed. To explore the characteristics of companies with more disclosure, two tests will be used; Kolmogorov – Smirnov test; as a parametric; and Mann Whitney test as non parametric.

Regarding the determinants of voluntary disclosure, it can be noticed that OLS regression analysis is the dominant statistical technique in the disclosure literature. However, there are two types of tests parametric and non parametric. The parametric techniques are based on some assumptions that must be satisfied. On the other hand, non parametric techniques are considered to be distribution free tests, so no need to justify these assumptions. It is commonly agreed that parametric tests are more powerful than non parametric tests when the assumptions of a parametric tests in terms of data are met (Siegel and Castellan (1988) as cited in Cooke (1998); Field (2000))

Among the regression assumptions which justify employing the parametric tests, linearity; normality of the error distribution; hmoscedasticity; and independence of error terms Moreover, the number of observations must be greater than the number of parameters to be estimated. In addition to using interval scale in measuring data, there should be no perfect multicollinearity. (Field, 2000 and Gujarati, 2003).

If any of these assumptions is violated then the forecasts, confidence intervals, and economic insights yielded by a parametric test may be inefficient and / or misleading. To avoid such problem transformation may be used before employing the parametric tests. Therefore, the empirical section will start by performing regression diagnostics to examine the data before choosing the appropriate tests. STATA software will be used to carry out the statistical analysis.

Normality of Residuals The assumption of normality implies that errors (residuals) should be normally distributed. Technically, normality is necessary only for hypothesis tests to be valid. Normality of residuals can be checked by both normality plots and normality tests. The most common normality plots include: Q-Q plot; P-P plot; histogram; and Density estimate. The Q-Q plot plots the quantiles of a variable against the quantiles of normal distribution while P-P plot represents the standardized normal probability plot. The histogram indicates whether the distribution of the variable is skewed or takes the bell shape. Density estimate plots the density of a variable and the normal density. Moreover, the most common normality tests skewness-kurtosis and Shapiro-Wilk will be used for both the residuals and the dependent variable.

Linearity To check for the linearity assumption, the residuals will be plotted versus the independent variable(s) values. Linearity can also easily be checked through plotting each independent variable against the dependent variable and see how well does the fitted regression line represent their relationship. However, if linearity exists, there will be no obvious clustering of positive residuals or a clustering of negative residuals.

Homoscedasticity of Residuals To check for heteroscedasticity, two methods will be employed; graphical and numerical method. One can look at plots of residuals versus time and residuals versus predicted values, and be alert for evidence of residuals that are getting larger (i.e., more spread-out) either as a function of time or as a function of the predicted value. Numerically two tests will be conducted by STATA the first is Breusch-Pagan / Cook-Weisberg and White's tests and the second is Cameron & Trivedi's decomposition of IM test.

Checking for Multicollinearity Multicollinearity implies that there is a linear relationship between two or more explanatory variables. In such relationship between the predictors, OLS estimators may be biased and if this linear relationship among the predictors is perfect, the estimates for a regression model cannot be uniquely computed. To check for multicollinearity, the current study will apply the common ways which include correlation coefficients; parametric (Pearson) and non parametric (Spearman); and variance inflation factors (VIF) in addition to tolerance values.

To test the hypothesis of the current study both bivariate and multivariate analysis will be used.

Bivariate analysis: by calculating Pearson and Spearman correlation coefficients for continuous independent variables , and using T-test and Mann Whitney test for categorical independent variables.

Multivariate analysis: The following statistical techniques will be applied: OLS with transformation, Normal scoring, GLS regression, Tobit regression and Quantile regression.

5.7 Summary and Conclusion

The current study is conducted based on a multi-approach paradigm which represents the interpretivist – functionalist transition zone. The study aims to investigate the voluntary disclosure practices in the annual reports; the status quo; of the most active companies in an emerging capital market; namely Egypt, that lacks prior voluntary disclosure studies. Furthermore it seeks to examine empirically the association between the extent of voluntary disclosure and a number of corporate governance characteristics, ownership aspects and firm characteristics. Therefore the study follows the deductive approach that requires developing hypotheses based on a theory. As indicated in chapter four, the current study employed multi approach theoretical framework that benefit from integrating a number of disclosure theories. As such, the study is considered to be quantitative study. It measures the extent of total voluntary disclosure and its categories in the corporate annual report based on self constructed checklist of voluntary disclosure items and using un-weighted disclosure index. The most active non financial listed companies in the Cairo and Alexandria Stock Exchange (CASE) represent the sample population in the current study. The period of study is the four years from 2003 to 2006 after issuing the new listing rules in 2002 and the Egyptian corporate governance code in 2005. The final sample is 64 companies with 182 firm year observations. The following chapter presents the research hypotheses before moving to the empirical section in chapter 7 and 8.

Appendix 5.1: Voluntary Disclosure Checklist

	Information items	Examples of disclosure studies
1	**General information**	
1.1	Statement of corporate Strategy.	Chow and Wong – Boren (1987), Ferguson et al (2002), Chau and Gray (2002), Haniffa and Cooke (2002), Eng and Mak (2003), Leventis and Weetman (2004), Ghazali and Weetman (2006), Barako et al (2006)
1.2	Information on the principal products, projects.	Hossain et al. (1994), Suwaidan (1997), Ho and Wang (2001), Eng and Mak (2003), Leventis and Weetman (2004), Ghazali and Weetman (2006), Barako et al (2006)
1.3	Productive capacity.	Leventis and Weetman (2004), Egyptian annual reports
1.4	An overview of industry.	Eng and Mak (2003), Leventis and Weetman (2004), Ghazali and Weetman (2006), Lim et al (2007)
1.5	Information on competitive environment.	Hossain et al. (1994), Haniffa and Cooke (2002), Barako et al (2006), Lim et al (2007)
1.6	Organizational structure.	Hossain et al. (1994), Meek et al.; (1995); Chau and Gray (2002); Eng and Mak (2003); Leventis and Weetman (2004), Barako et al (2006), Patelli and Prencipe (2007), and Lim et al (2007)
1.7	Presenting annual reports in Arabic and English.	Egyptian annual reports
2	**Financial information**	
2.1	Historical data and statistics for more than 2 years	Hossain et al. (1994), Chau and Gray (2002), Haniffa and Cooke (2002), Eng and Mak (2003), Leventis and Weetman (2004), Ghazali and Weetman (2006), Tsamenyi et al (2007)
2.2	Any industry-specific ratios.	Lim et al (2007), Patelli and Prencipe (2007)
2.3	Using charts, Graphs, Photos, or figures.	Leventis and Weetman (2004)
2.4	Reasons and effects of acquisitions / disposals on past	Haniffa and Cooke (2002), Leventis and Weetman (2004), and Lim et al

	results.	(2007)
2.5	Financial ratios disclosed (profitability, leverage, liquidity, and other ratios)	Cooke (1989), Hossain et al. (1994), Suwaidan (1997), Ho and Wang (2001), Ferguson et al (2002), Eng and Mak (2003), Ghazali and Weetman (2006), Barako et al (2006), Hassan et al (2006), Tsamenyi et al (2007)
2.6	Amount spent on training	Hossain et al. (1994), Ferguson et al (2002), Chau and Gray (2002), Haniffa and Cooke (2002), Leventis and Weetman (2004), Ghazali and Weetman (2006)
3	**Non- financial information**	
3.1	Market share.	Haniffa and Cooke (2002), Leventis and Weetman (2004), Barako et al (2006)
3.2	Number of employees trained.	Hossain et al. (1994), Ferguson et al (2002), Chau and Gray (2002), Haniffa and Cooke (2002), Leventis and Weetman (2004), Ghazali and Weetman (2006)
3.3	Company policy on human resources and employee training.	Hossain et al. (1994), Ferguson et al (2002), Chau and Gray (2002), Haniffa and Cooke (2002), Leventis and Weetman (2004), Ghazali and Weetman (2006)
3.4	Research and development activities.	Chow and Wong – Boren (1987), Hossain et al. (1994), Meek et al (1995), Suwaidan (1997), Ferguson et al (2002), Ghazali and Weetman (2006)
3.5	Productivity indicator.	Barako et al (2006), Patelli and Prencipe (2007)
3.6	marketing network and the principal markets.	Chow and Wong – Boren (1987), Hossain et al. (1994), Suwaidan (1997), Ferguson et al (2002), Chau and Gray (2002), Haniffa and Cooke (2002), Leventis and Weetman (2004), Ghazali and Weetman (2006), Barako et al (2006)
4	**Future information**	
4.1	Effects of acquisition / disposals on future results	Haniffa and Cooke (2002), Lim et al (2007)
4.2	Future expansion and capital expenditure	Gul and Leung (2004), Barako et al (2006), Egyptian annual reports
4.3	General discussion of future industry trend	Hossain et al. (1994), Ferguson et al (2002), Haniffa and Cooke (2002),

		Ghazali and Weetman (2006)
4.4	Information on earnings and cash flow forecast.	Gul and Leung (2004), Lim et al (2007)
4.5	Information on production plan and forecast.	Gul and Leung (2004), Hossain et al. (1994), Egyptian annual reports
4.6	Information on market share forecast	Gul and Leung (2004), Lim et al (2007)
5	**Corporate governance**	
5.1	List of board members.	Hossain et al. (1994), Barako et al (2006), Hassan et al (2006), Tsamenyi et al (2007)
5.2	Picture of chairperson and/or other members.	Haniffa and Cooke (2002), Egyptian annual reports
5.3	Board member qualifications.	Hossain et al. (1994), Haniffa and Cooke (2002), Barako et al (2006), Tsamenyi et al (2007)
5.4	Number of shares held by members of the board.	Barako et al (2006), Tsamenyi et al (2007)
5.5	Compensation policy for top management	Leventis and Weetman (2004), Tsamenyi et al (2007)
5.6	Information on audit committee and its members	Egyptian annual reports, Tsamenyi et al (2007),
5.7	Corporate governance codes, policies, implementation extent	Egyptian annual reports, Tsamenyi et al (2007),
5.8	Composition of board of directors: executives and non-executives	Barako et al (2006), Egyptian annual reports
6	**Shareholders information**	
6.1	Composition of shareholdings and Majority shareholders	Leventis and Weetman (2004), Hassan et al (2006)
6.2	Share performance, traded volume and value.	Haniffa and Cooke (2002), Leventis and Weetman (2004), Ghazali and Weetman (2006)
6.3	Share price information.	Hossain et al. (1994), Ferguson et al (2002), Chau and Gray (2002), Haniffa and Cooke (2002), Leventis and Weetman (2004), Ghazali and Weetman (2006), Tsamenyi et al (2007)
6.4	Factors affecting dividends policy.	Meek et al (1995), Leventis and Weetman (2004)
6.5	Information on risk management	Hossain et al. (1994), Haniffa and Cooke (2002), Ghazali and Weetman

		(2006), Tsamenyi et al (2007)
6.6	Dividends per share compared with previous years.	Hassan et al (2006)
7	**Social responsibility information**	
7.1	Environmental information	Hossain et al. (1994), Meek et al (1995), Ferguson et al (2002), Chau and Gray (2002), Haniffa and Cooke (2002), Leventis and Weetman (2004), Ghazali and Weetman (2006), Barako et al (2006), Tsamenyi et al (2007)
7.2	Community involvement	Hossain et al. (1994), Meek et al (1995), Ferguson et al (2002), Chau and Gray (2002), Haniffa and Cooke (2002), Leventis and Weetman (2004), Ghazali and Weetman (2006)
7.3	Charitable donations and sponsorship	Meek et al (1995), Gray et al (1995), Ferguson et al (2002), Chau and Gray (2002), Haniffa and Cooke (2002), Leventis and Weetman (2004), Ghazali and Weetman (2006)
7.4	Health and safety information	Meek et al (1995), Gray et al (1995), Chau and Gray (2002), Ghazali and Weetman (2006)
7.5	Significant events calendar	Ghazali and Weetman (2006), Egyptian annual reports
7.6	Improvement in customer service	Haniffa and Cooke (2002), Ghazali and Weetman (2006)
7.7	Award/ ratings received and attempts to get or sustain it	Haniffa and Cooke (2002), Ghazali and Weetman (2006)

Chapter Six: Development of Hypotheses

6.1 Introduction

In reviewing disclosure literature, it can be noticed that disclosure practices are a sophisticated phenomenon that may be affected by several variables. Previous studies have mainly focused on the impact of firm characteristics on the extent of disclosure. As indicated in chapter two and four, there is no one theory can fully explain the corporate disclosure practices. Also the recent direction in disclosure literature aims to explain disclosure practices not only by firm characteristics but also by other variables such as corporate governance, culture, economic and institutional features. In addition to the firm characteristics, the current study use some attributes of corporate governance, and ownership structure as possible determinants of voluntary disclosure.

In summary, there are three main hypotheses:

H.1 there is an association between a number of corporate governance characteristics and the extent of voluntary disclosure in the annual reports of the most active Egyptian listed companies.

H.2 there is an association between a number of ownership aspects and the extent of voluntary disclosure in the annual reports of the most active Egyptian listed companies.

H.3 there is an association between a number of firm characteristics and the extent of voluntary disclosure in the annual reports of the most active Egyptian listed companies.

Where the characteristics to be explored are as follows:

1. Corporate governance:

1.1 Board leadership (Role duality)

1.2 Board composition

- *Non executive directors*
- *Family members on the board*
- *Foreign members on the board*

1.3 Board size

2. Ownership Structure

3.1 Governmental ownership

3.2 Institutional ownership

3.3 Block holder ownership

3. Firm characteristics:

4.1 Structure-related variables (Size and Gearing)

4.2 Performance-related variables (Profitability and Liquidity)

4.3 Market-related variables (Listing status, Industry type and Audit firm)

6.2 Corporate governance: Board characteristics

As indicated in chapter two, the board of directors plays an important role in corporate governance practices. The members of the board are responsible for the governance of their companies. The disclosure literature investigates the effect of number of board characteristics on the extent of disclosure. Based on the evidence from these studies along with the theoretical framework of the current study this section provides the hypotheses related to board characteristics. Three characteristics will be investigated namely, board leadership, board composition and board size.

6.2.1 Board leadership (Role duality)

Role duality exists when the chief executive officer (CEO) is also the chairman of the board. Role duality creates a strong individual power base, which could affect the effective control exercised by the board (e.g. Jensen and Meckling, 1976; Fama and Jensen, 1983; Donaldson and Davis, 1991; Whittington, 1993). On the other hand, role duality enables the CEO to act rapidly. Moreover, the chairman will be in a better position to make good decisions due to his better knowledge about the firm. Moreover, role duality may provide strong leadership (Brickley et al., 1997).

A number of studies indicate that role duality may constrain board independence and impair the board's oversight and governance roles which include corporate disclosure policies. Forker (1992) finds a negative association between role duality and corporate disclosure; share option disclosure. Also, there is evidence of a negative significant relationship with the extent of voluntary disclosure in Malaysia and Hong Kong (Haniffa and Cooke, 2002; Gul and Leung, 2004). The expertise of non-executive directors moderates the negative association between role duality and voluntary disclosure (Gul and Leung, 2004). On the other hand, some studies conclude that role duality is not associated with the level of voluntary disclosure (Arcay and Vazquez, 2005; Cheng and Courtenay, 2006; Ghazali and Weetman, 2006).

Board leadership may be affected by aspects of culture. Therefore, caution must be taken about the negative association of role duality. Based on Hofstede's model, Egyptian culture is characterized by collectivism and large power distance (Dahawy and Conover, 2007). Role duality is dominant in Egypt, (ROSC, 2004). The Egyptian code of corporate governance recognises this issue of dominant form of board leadership and just recommends companies to separate the posts of chairperson and managing director CEO.

The code also states that "Should joining the posts be necessary, its reasons should be clarified in the corporation's annual report, further, a non executive vice chairperson should be appointed" (paragraph 3.6, p.8).

In view of the prior empirical results we test for the negative association between role duality; measured by dummy variable 1 if the chairman is the CEO and 0 otherwise; and the voluntary disclosure.

H1.1 *there is negative association between role duality and the level of voluntary disclosure in annual reports of the most active Egyptian listed companies.*

6.2.2 Board composition

6.2.2.1 Non-executive directors

Non executive directors are the directors other than managing directors and functional directors. It is commonly agreed that using non executive is considered as a way for good corporate governance (Crowther and Jatana, 2005). Non executive directors can play an important role in monitoring the performance of management and limit managerial opportunism (see Fama, 1980; Fama and Jensen, 1983). Gul and Leung (2004) argue that corporate boards with a higher proportion of expert non-executive directors are expected to be more effective in board monitoring and encouraging higher levels of corporate transparency. Such members will convey their experience and experts views to the board. In addition they are expected to protect the interests of all stakeholders not only shareholders.

However, as indicated in chapter two, even non executive majority boards may be controlled by insider directors. The nature of non executive appointments (Crowther and Jatana, 2005) and tenure of current non executive directors in the same company (Patelli and Prencipe 2007) are examples of the factors that threaten the independence of non executive directors. This criticism is clear in developing countries such as Egypt.

Prior studies indicate that outsider dominated boards are less likely to suffer from financial statement fraud and more likely to issue earnings forecasts consistently (Beasley, 1996; Ajinkya et al., 2005). Forker (1992) finds positive association of independent directors and share option disclosure and Chen and Jaggi (2000) document a positive relationship between the proportion of independent non-executive directors and inclusiveness of financial disclosure. Moreover, there is evidence of a positive association between board independence and voluntary disclosure in annual reports of firms listed in Spain and Singapore market (Arcay and Vazquez, 2005; Cheng and Courtenay, 2006).

On the other hand, Eng and Mak (2003) find significant negative association of outside directors on the board and voluntary disclosure in Singapore. Using sample from Malaysia, Haniffa and Cooke (2002) find negative but insignificant association between non executive directors and the extent of voluntary disclosure. Furthermore, Ho and Wong (2001a) conclude that the ratio of independent directors has insignificant association with the extent of voluntary disclosure in Hong Kong.

In Egypt, there are no rules governing the balance between executives and non executive directors. Moreover, the concept of the independent board member is not clearly applied in most of the Egyptian companies (Fawzy, 2003). There is no rule or criterion to choose the independent non executive directors. In most cases it depends on the previous relationship between the candidate and the chairman or executive directors. In view of the mixed evidence from literature, we test for an association between the proportion of non-executive directors and the level of voluntary disclosure in the annual reports of the most active Egyptian listed companies.

H1.2 *there is an association between the proportion of non-executive directors and the level of voluntary disclosure in annual reports of the most active Egyptian listed companies.*

6.2.2.2 Family members on the board

A company is classified as a family company if the founder or descendants continue to hold positions in the top management or on the board, or are among the company's largest shareholders (Anderson and Reeb, 2003; Wang, 2006; and Ali et al, 2007). Family ownership and control is dominant among publicly traded companies around the world (Burkart et al, 2003). Family members usually hold important positions on both the management team and the board of directors (Wang, 2006).

The traditional view of family companies is that family members have the access to required information and the incentive to run the company in their interests. Ali et al (2007) indicate that the characteristics of family companies raise interesting issues about their corporate disclosure practices. They point out that US family companies face two types of agency problems. The first, and less severe, arises from the separation between ownership and management, while the second, and the more severe, arises between controlling and non-controlling shareholders. Also, Chen et al (2008) indicate that while family companies, compared to non-family companies, tend to provide less voluntary disclosure about earning forecasts, they disclose more earnings warnings. They indicate that family owners having greater litigation and reputation cost concerns. Moreover, potential investors may consider companies with family members on the board as an unattractive. Therefore it can be argued that such companies may have the motivation to disclose more information to prove themselves as a good investment opportunity. Furthermore, based on political cost theory and legitimacy theory, it can expect that active family companies will be in the public eye and therefore have the incentives to legitimize and distinguish themselves by being more transparent.

Wang (2006) argues that family members have a greater stake in the company than non-family executives, due to the long term and sustainable presence of family members in the company and the need to protect family reputations. He documents evidence challenging the traditional view that family companies have entrenched ownership and thus have greater incentives to opportunistically manage reported earnings than non-family companies. Moreover, Ali et al, (2007) conclude that US family companies report better quality earnings and make better financial disclosure than non-family companies. They point out that their results may not apply to companies in other countries due to the institutional differences across countries.

However, the available evidence from prior disclosure studies suggests negative association of the proportion of family members on the board and the extent of voluntary disclosure. Haniffa and Cooke (2002) and Ghazali and Weetman (2006) find significant negative associations between voluntary disclosure and the proportion of family members on the board of Malaysian listed companies. The same was concluded by Ho and Wong (2001a) in Hong Kong. Chen and Jaggi (2000) indicate that the positive relation between independent non-executives directors and the inclusiveness of financial disclosures is weaker for family controlled companies.

In Egypt, a single family may have controlling stakes in a number of companies whether directly or indirectly (Sourial, 2004). While most family companies are closed companies, a number of family companies benefit from the new policy of privatization, governmental incentives and from market imperfections (Youssef, 2003). The most active listed companies in CASE include a number of such family led companies.

Based on the theoretical and empirical evidence from prior studies, the current study test the relationship between the existence of family members on the board and the extent of voluntary disclosure in the annual reports of the most active Egyptian listed companies. Dummy variable will be used to measure this variable; 1 if there are family members on the board and 0 if otherwise.

H1.3 *there is an association between the presence of family members on the board and the level of voluntary disclosure in annual reports of the most active Egyptian listed companies.*

6.2.2.3 Foreign member on the board

Emerging capital markets are willing to attract foreign direct investment. However, the internal governance of companies is problematic in such markets especially in transitional economies. One of the related problems is the shortage of management resources (Youssef, 2003). In this regard foreign directors can play a unique role. The presence of foreign members on the board is one of the forms of importing western corporate governance system. Foreign members are often assigned to the board as representatives of foreign investors. Therefore, "the presence of foreign directors on the board dramatically alters the ownership - control equation. It provides the foreign investors with a tangible direct representation that can be leveraged to influence the strategic direction pursued by the organization" (Ramaswamy and Li, 2001, p. 212)

It is argued that outsider Anglo-American board members have a particularly important role with respect to monitoring companies in small or emerging economies (Oxelheim and Randoy, 2001). The existence of those foreign members should reduce the managerial entrenchment. Foreign directors possess unique knowledge and understanding of various overseas strategic market areas a firm is interested in (Ramaswamy and Li, 2001).

The presence the foreign members on the board may signal the ability of the company to deal with the international markets that characterized by high level of disclosure and transparency. Moreover, it can be expected that companies with foreign directors may disclose more information to signal their managerial capabilities and to distinguish themselves from other companies. Related to stakeholder theory, Carey (1994) as cited in Ramaswamy and Li (2001) indicates that foreign members possess the social capital - networks of connections with key stakeholders. Consequentially, high level of voluntary disclosure can be expected in companies with foreign member on their board.

Furthermore, foreign members, due to cultural differences, may have different attitudes about financial reporting and how to deal with stakeholders' information need. It is commonly accepted that foreign members are more familiar with the western pattern of disclosure and corporate governance. Consequently it can be expected that the extent of voluntary disclosure will be higher in the annual reports of companies with foreign members on their boards. The current study means by foreign members non Arab members. Although there may be Arab, not Egyptian, members on the board of some companies, the current study does not consider them as foreign members due to the relative similarity in culture and in the framework of financial reporting.

Based on the above discussion, the current study expects that the presence of foreign members on the board will positively affect the level of voluntary disclosure in the annual reports of the most active Egyptian listed companies.

H1.4 *there is positive association between the presence of foreign members on the board and the level of voluntary disclosure in annual reports of the most active Egyptian listed companies.*

6.2.3 Board size

As a result of communication and coordination problems related to larger groups, increased board size may have a negative impact on the board's effectiveness. Moreover, larger groups have a lower level of motivation and satisfaction due to the lack of participation usually observed in large decision making groups. Therefore, larger boards may be less likely to become involved in strategic decision making including disclosure policy (Goodstein et al, 1994).

Oversized boards slow down decision-making and reduce individual commitment (Lauenstein, 1977) and are generally ineffective in conducting effective discussions and making strategic decisions in a timely fashion (Herman, 1981 and Kovner, 1985). Yermack (1996) notices higher market valuation of companies with small board of directors. According to Haniffa and Hudaib (2006), board size has a significantly negative relationship with market performance.

On the other hand, increased board size may increase the expertise diversity in the board including financial reporting expertise. Large boards may increase the representation of independent directors and, therefore, improving the probability of disclosing more information voluntarily. In addition, the larger board members, the higher possibility to represent the view of different stakeholders.

A number of studies provide evidences in favour of the larger board size. Laksmana (2007) provides evidence of the positive association between the size of the board and the extent of voluntary disclosure of executive compensation. Beasley (1996) indicates that the likelihood of financial statement fraud decreases with the decrease in board size. Beasley and Salterio (2001) and Klein (2002) argue that limited board size will also limit the number of independent directors available to serve on the audit committee, and report evidence that audit committee independence increases with the board size. There is also evidence of a positive association between board size and the issuance of management forecasts (Karamanou and Vafeas, 2005) in addition to the inverse relation with the cost of debt (Anderson et al. 2004). However, a number of studies conclude that board size is not associated with the level of voluntary disclosure (Arcay and Vazquez, 2005; Cheng and Courtenay, 2006).

In Egypt, the board must consist of an odd number with a minimum of the three members. Board members must be shareholders or representatives of the participating companies with the exception of two members (as a maximum) who are chosen as experts of the field (Fawzy, 2003). So the board size is expected to vary between Egyptian companies. In the context of the current study, larger boards would have more expertise diversity and knowledge to make effective disclosure decisions. Thus, the study tests the effect of board size; measured by the number of board members; on the extent of voluntary disclosure in the annual reports of the most active Egyptian listed companies

H1.5 *there is an association between board size and the level of voluntary disclosure in the annual reports of the most active Egyptian listed companies.*

6.3 Ownership structure

6.3.1 Block holder ownership

With the separation between ownership and management; or control of a firm; it is proposed that the conflict between the principal and the agent; agency problem; will increase with widely held companies (Fama and Jensen, 1983). To mitigate the severity of such problem, mangers may be willing to use disclosure. By disclosing more information voluntarily managers can send a signal to the principal about their capabilities and the company performance. In other words, it can be expected that the extent of voluntary disclosure in the annual reports decreases with higher proportion of block holder ownership. In addition, block holders may represent the key stakeholder who has power and therefore mangers may use several methods other than voluntary disclosure in corporate annual report to satisfy them.

The empirical evidence from prior studies is mixed. For example, Depoers (2000) provides evidence from France that ownership concentration is insignificant variable. Also, Eng and Mak (2003) indicate that while lower managerial ownership and significant government ownership are associated with increased voluntary disclosure; different types of block-holder ownership (individuals, institutions/corporations and nominees) are not related to disclosure in the Singapore context.

However, evidence of negative association between the level of disclosure and ownership concentration was provided by Mitchell et al (1995) and Schadewitz and Blevins (1998). Chau & Gray (2002) present evidence of a significant positive association between wider ownership structure and the extent of voluntary disclosure in Hong Kong and Singapore. From Malaysia, Hossain et al (1994) provide evidence of a significant negative relationship between the ownership by top ten shareholders and the extent of voluntary disclosure. In contrast, Haniffa & Cooke (2002) find a significant positive association between the ownership of the ten largest shareholders and the extent of voluntary disclosure. Using the same variable; ownership of top 10 largest shareholders; in the same country, Ghazali and Weetman (2006) report insignificant association.

Based on the above discussion, the current study tests for the negative association between block holder ownership; measured by the percentage of shareholders who owns 5% or more; and the extent of voluntary disclosure in the annual reports of the most active Egyptian listed companies.

H2.1 *there is negative association between block holder ownership and the level of voluntary disclosure in the annual reports of the most active Egyptian listed companies.*

6.3.2 Governmental ownership

There are different views regarding governmental ownership. Companies with higher government ownership have government funding and can easily obtain capital, so they may not need to attract investors and consequently they have less incentives to disclose more information. On the other hand these companies are in the public eye and may have some non profit considerations beside their economic objective. So they may subject to pressure from others to disclose more information.

Prior studies indicate mixed results. Eng and Mak (2003) find positive association between voluntary disclosure and government ownership. Although Suwaidan (1997) presents evidence of positive association between the extent of voluntary disclosure and government ownership in Jordanian listed companies, Naser et al (2002) find no significant association. Moreover, Luo et al (2006) conclude that government ownership affect the association between voluntary disclosure level, current returns and future earnings.

In Egypt, 314 public sector companies were identified, in 1991, for privatization and were listed on the Egyptian stock exchange. Some of these companies are still awaiting privatization and others are partially privatized. To attract investors and facilitate the privatization, companies with higher government ownership may disclose more information voluntarily. Moreover, managers of these companies may use be willing to signal to the market their capabilities. Therefore, it can be expected that the extent of disclosure may differ according to the portion of governmental ownership.

H2.2 *there is an association between governmental ownership and the level of voluntary disclosure in the most active Egyptian listed companies.*

6.3.3 Institutional ownership

It is generally assumed that institutional investors are more sophisticated and have more technical expertise to monitor managers effectively (Guan et al.; 2007). The relationship between institutional ownership and disclosure has been examined in prior studies, the evidence is mixed. El-Gazzar (1998) argues that large institutional ownership may encourage firms to disclose voluntarily more information. McKinnon and Dalimunthe (1993) and Mitchell et al. (1995) examine voluntary disclosure of segment information by Australian companies and provide weak support for the positive relation between ownership diffusion and disclosure. Barako et al (2006) find a positive association between institutional ownership and the extent of voluntary disclosure in Kenyan corporate annual reports. In Taiwan Guan et al (2007) document positive association of institutional ownership and the aggregate extent of disclosure in the annual reports and website. On the other hand, Schadewitz and Blevins (1998) address interim disclosures in Finnish firms and provide evidence of negative association between institutional ownership concentration and disclosure.

In Egypt, an organization is allowed to be a member in the board of directors of any other company. This organization usually appoints its representatives on the board and therefore they have access to information. As such, companies with higher institutional ownership may have less incentives to disclose more information voluntarily. In this regard, Crowther and Jatana (2005) point out that there may be a potential conflict of interest. Those members should work in the interests of their own company and the company they are a nominee director of.

The percentage of institutional ownership, in Egypt, has increased over the last few years. One of the reasons of this increase is that the large privatization deals were mainly conducted by institutions (Abdel Shahid, 2003). The current study tests the effect of institutional ownership on voluntary disclosure in corporate annual reports.

H2.3 *there is an association between institutional ownership and the level of voluntary disclosure in the annual reports of the most active Egyptian listed companies..*

6.4 Firm Characteristics

It is common to classify firm characteristics that may affect the extent of disclosure into three groups: structure related variables (firm size and gearing); performance related variables (profitability and liquidity); and market related variables (cross listing, industry membership and audit firm) (Lang and Lundholm, 1993; Camfferman and Cooke, 2002).

6.4.1 Structure related variables:

6.4.1.1 Firm size

As indicated in chapter two, firm size is the most common variable in disclosure literature either in developed or developing countries. The majority of disclosure studies indicate that firm size has a significant positive association with the level of disclosure; voluntary and mandatory. Examples of disclosure studies that provide evidence of such association are Singhvi,1968; Buzby, 1975; Chow& Wong-Born, 1987; Wallace,1988; Tai et al, 1990; Cooke, 1992; Hossain et al 1994; Ahmed & Nicholls, 1994; Wallace& Naser 1995; Marston & Robson, 1997; Owusu- Ansah, 1998; Chen & Jaggi 2000; Depoers 2000; Camfferman &Cooke 2002; Haniffa & Cooke, 2002; Naser et al 2002, Ferguson et al.; 2002; Eng and Mak, 2003, Ghazali and Weetman 2006; Barako et al.; 2006; Alsaeed, 2006; Agca and Onder 2007 and Boesso, and Kumar, 2007.

Many theories have been used to explain the influence of firm size on disclosure policy. Based on the political economic approach, larger companies are more exposed to political attention, so these companies have more incentives to disclose more information to reduce political costs (Cooke, 1989; and Camfferman & Cooke 2002). The larger the firm size the higher the agency costs (Jensen and Meckling, 1976). Some studies point out that the proportion of disclosure costs is smaller for larger companies (Lang and Lundholm, 1993; Verrecchia 2001). The desire to reduce the costs of capital (Botosan 1997; Lang and Lundholm, 1993) The more disclosure the more competitive advantages (Buzby, 1975; Dye 1985; Meek et al, 1995). Furthermore, based on stakeholder theory the larger firm size the larger the number of stakeholders who are willing to get more and different information. However, due to being more exposed to political attacks, Cooke (1998) indicates that large companies may respond by reducing the extent of disclosure in their annual reports. Therefore, the proposed theoretical relationship is somewhat uncertain.

In this regard, it can be noticed that firm size is a comprehensive variable that can proxy a number of corporate attributes such as competitive advantage, information production costs, and political costs (Hossain et al 1994 and Abdelsalam, 1999). Moreover, while there is strong evidence that firm size associates positively with the extent of disclosure (e.g. Marston and Shrives, 1991 and Ahmed and Courtis, 1999), Gruning (2007) concludes that that firm size has an indirect effect on disclosure which is mediated by listing status. The author indicates that listing status can be identified as the key element in understanding the network of related drivers of corporate disclosure.

Different measures for firm size have been used in the disclosure literature such as total assets, total sales, number of employees and market capitalization. A number of studies combine some measure in one measure (Cooke, 1992) while others use one measure. However, there is no criterion to choose the best proxy of firm size (Hassan et al., 2006). Reviewing the literature, it can be noticed that the most common measure is total assets.

Drawing on the theoretical and empirical evidence from prior studies, the current study can expect a positive relationship between the firm size and the level of voluntary disclosure in the annual reports of the most active Egyptian listed companies. The study measures firm size by total assets.

H3.1.a *there is a positive association between firm size measured by total assets and the level of voluntary disclosure in annual reports of the most active Egyptian listed companies.*

6.4.1.2 Gearing

One of the measures of financial risk is gearing. It is a ratio of debt to shareholders equity. It represents the ability of the firm to meet its obligations. Based on agency theory, companies with higher gearing ratio may incur higher monitor costs and therefore may disclose more information to reduce these agency costs (Jensen and Meckling 1976; myers, 1977; Malone et al 1993; Wallace et al 1994; Abd-Elsalam 1999; and Depoers 2000).

However, Camfferman & Cooke (2002) indicate that such effect may differ depending on the debt holder; banks or capital markets. In capital markets based financial system, highly geared companies may have more incentive to increase disclosure than highly geared companies in the code based legal system where the debt raised from banks. The number of stakeholders will differ and therefore highly geared companies must deal with them. Furthermore, Eng and Mak (2003) argue that the restrictive debt covenants in debt agreement can control agency costs of gearing instead of more disclosure in annual reports. However, lower geared firms may disclose more information in their annual reports to signal to the market their financial structure.

The empirical studies provide contradictory results. While some studies found a significant positive association between gearing and disclosure (e.g., Malone et al 1993; Ng and Koh 1994; Hossain et al 1995; Naser et al 2002; and Camfferman & Cooke (Netherland) 2002) other studies found a significant negative association (e,g. Meek et al 1995). On the other hand, there are a number of studies found no significant association between gearing and disclosure (such as: Chow & Wong- Boren 1987; Wallace et al 1994; Raffournier 1995; Wallace& Naser 1995; Ahmed 1996; Chen & Jaggi 2000; Depoers 2000; Camfferman & Cooke (UK) 2002 ; and Haniffa & Cooke 2002)

In Egypt, despite the increasing role of capital market in providing debts, banks are the main provider. In view of the prior mixed results, the current study has no specific expectation about the direction of the association between gearing and voluntary disclosure. Therefore, the study tests for a significant association through the following hypothesis.

H3.1.b *there is an association between gearing measured by the ratio of total debt to equity and the level of voluntary disclosure in annual reports of the most active Egyptian listed companies.*

6.4.2 Performance related variables:

6.4.2.1 Profitability

Profitability as a measure of performance is considered to be one of the most common explanatory variables that have been used in disclosure literature. A number of theoretical and empirical bases can be noticed. Managers can use disclosure to deal with the problem of information asymmetry, they look for improving the corporate image and for maintaining their positions (Singhvi, 1968). So, based on the agency theory it can be assumed that the more profitable companies, the more disclosure. The political costs theory supports this idea. It suggests that managers of companies with higher profits are motivated to disclose more information to justify their higher profits (Inchausti, 1997). Stakeholder theory support the idea of disclosing information to satisfy all stakeholders not only shareholders. In this regard, profitability is considered to be one of the main information needs of many stakeholders, other than shareholders, such as employees, creditors, governmental agencies, and customers. Signalling theory suggests more disclosure in profitable companies as a signal to distinguish themselves from less profitable companies or to avoid under evaluation of their shares (Akerlof, 1970; Foster, 1986; Inchausti, 1997). However, companies with bad news may be motivated to disclose more information to reduce the risk of legal liability and severe share devaluation or loss of reputation (Skinner, 1994). As such different theories can predict different direction of the relation between profitability and voluntary disclosure.

Empirically, the prior studies provide mixed evidence of the relation between profitability and the level of disclosure. While some studies show a significant positive association between profitability and disclosure (such as, Singhvi, 1968; Ng & Koh, 1994; Patton & Zelenka 1997; Owusu-Ansah 1998; Haniffa &Cooke, 2002; Naser et al, 2002, Ali et al. 2004), other studies report a negative association between profitability and disclosure (such as: Wallace & Naser 1995; Inchausti, 1997; Chen & Jaggi, 2000). On the other hand, Wallace et al (1994), Raffounier (1995), Meek et al (1995), and Hackston & Milne (1996) found no significant association between profitability and disclosure.

From the above, we can notice that there is no agreement about a specific theoretical expectation about the effect of profitability on the extent of disclosure. The current study tests the significant association between profitability and voluntary disclosure. Following the literature, return on equity ROE is used as a measure of profitability.

H3.2.a. *there is an association between profitability measured by return on equity and the level of voluntary disclosure in annual reports of the most active Egyptian listed companies.*

6.4.2.2 Liquidity

Liquidity is another measure that can be used to evaluate the firm performance. Some of prior disclosure studies use signalling theory to explain the relation between liquidity and disclosure. According to this theory companies with considerable or reasonable liquidity ratio may be more motivated to disclose information voluntarily to distinguish themselves from other companies that face liquidity problem. Camfferman & Cooke (2002) provide evidence of a positive association between liquidity and disclosure. On the other hand, agency theory suggests that companies with a low liquidity ratio might disclose more to satisfy the needs of shareholders and creditors. It may be worth to notice that managers may consider the balance between profitability and liquidity when they decide the level of disclosure. According to stakeholders, managers may be motivated to disclose more information about both of liquidity and profitability. However, Wallace et al (1994) and Naser et al (2002) report evidence of negative association between liquidity and disclosure, while barako et al (2006) provide evidence from Kenya of insignificant association between liquidity and voluntary disclosure.

In view of mixed evidence from prior research, there is no specific expectation in the current study about the direction of association between liquidity and disclosure. It tests the significant association between liquidity and voluntary disclosure.

H3.2.b *there is an association between liquidity measured by current ratio and the level of voluntary disclosure in annual reports of the most active Egyptian listed companies*

6.4.3 Market related variables

6.4.3.1 Industry type

The relation between the extent of disclosure and industry type has been tested in prior disclosure literature. It can be noticed that the level of disclosure in annual reports differs among different sectors. In this regard, proprietary costs and legitimacy theory are used to explain such relationship (Verrecchia,1983; Deegan and Gordon,1996). As a result of competition or political pressure, companies in some industries may face a level of pressure to disclose certain type of information. If a company does not adopt similar reporting strategy as other companies in the same sector or industry, the market may interpret this situation as a bad signal (Inchausti, 1997). This is also can be seen from the perspective of institutional theory. Based on mematic isomorphism, it can be assumed that companies in one sector will follow the similar disclosure patterns particularly those of the leading companies. A number of studies report evidence of following the disclosure practice of the dominant companies (Cooke, 1989; 1991; and Camfferman and Cooke, 2002).

The empirical evidence from previous studies is mixed. A number of studies report evidence of a significant association between the extent of disclosure and the industry type, manufacturing companies were found to disclose more information than non manufacturing companies (Cooke 1991, 1998; Ng & Koh 1994; Meek et al 1995; Suwaidan 1997; Camfferman & Cooke 2002; and Haniffa & Cooke 2002). It may be worth to mention that suggested reasons for this association differ among studies. On the other hand, some studies provide evidence of no significant association between the industry type and the extent of disclosure (Wallace et al 1994; Raffournier 1995; Inchausti 1997; Naser et al 2002; and Eng & Mak 2003).

All Egyptian listed companies are subject to the same disclosure requirements. The current study intends to test whether manufacturing companies include their annual reports more information voluntarily than non manufacturing companies. Therefore, following prior studies (e.g. Ghazali, 2004 and Abdelsalam and Weetman, 2007) the study captures this variable by classifying the investigated companies into manufacturing and non-manufacturing companies. Dummy variable is used, 1 for manufacturing companies and 0 for other companies. In view of mixed evidence from prior research, there is no specific expectation in the current study about the direction of association between industry and disclosure; it tests the significant association with voluntary disclosure.

H3.3.a *there is an association between industry type measured by dummy variable (1 for manufacturing company, o for non manufacturing) and the level of voluntary disclosure in annual reports of the most active Egyptian listed companies.*

6.4.3.2 Cross listing

As indicated in chapter two, the listing status is a common explanatory variable in disclosure literature either in developed or developing countries. Some companies have multiple listing, one in their home country and other in foreign country. Theoretically, companies listed in a foreign stock exchange are subject to different pattern of disclosure whether mandatory or voluntary. It is commonly agreed that companies with cross listing are subject to more pressure to provide further information and guidance than they do in their home markets (Lang et al.; 2003). Generally, the extent of disclosure in developed countries, efficient markets is greater than that in developing countries or emerging capital markets. Therefore such companies with cross listing will be familiar with such disclosure policy and may be motivated to distinguish themselves from other companies in local stock exchange by applying the foreign disclosure pattern. The cost benefit analysis may provide another explanation which the information to be disclosed will be ready and available.

According to stakeholder theory, companies listed in stock exchanges of developed and developing countries will deal with different stakeholders and so the policy of dealing with them may vary. As such these companies may have a motivation to behave; in the stock exchange of developing country; as a bench marker of other companies by disclosing more than the local disclosure requirements. However, cross listing may be considered also as an indirect reflection of the culture effect.

It has been hypothesised that companies with cross listing will disclose more information in their annual reports. The majority of prior disclosure studies provide evidence of a significant positive association between listing status and the level of disclosure (for example, Cooke, 1998 and Ferguson et al. (2002)).

However, Gruning (200 7) indicate that firm characteristics do not have only singular impacts on disclosure but they are interrelated. It is well accepted that large firms are expected to have a higher likelihood to be cross-listed than small ones, and the size of firms is to some extent industry specific.

Based on this empirical evidence, the study tests the following hypothesis of positive association between the extent of voluntary disclosure and cross listing. Cross listing is measured by a dummy dichotomous variable 1 if the company listed in other stock market and 0 if not.

H3.3.b *there is a positive association between cross listing and the level of voluntary disclosure in annual reports of the most active Egyptian listed companies.*

6.4.3.3 Audit firm

A number of prior disclosure studies test audit firm as a variable that may affect the level of disclosure. They use a dummy dichotomous variable to capture whether the auditor is one of big audit firms or not. It has been hypothesised that companies audited by an international big audit firm will disclose more information voluntarily. According to signalling theory, audit firm may benefit from the higher level of disclosure in the annual reports of its clients as a signal of its own quality and reputation. Therefore, auditing firms may support and encourage their clients to comply with mandatory disclosure requirements and to increase the extent of information voluntarily disclosed. (Ahmed & Nicholls 1994; Inchausti 1997; Abdelsalam 1999)

Results from prior studies regarding the relationship between audit firm and the extent of disclosure are contradictory. A number of prior studies, in developed and developing countries, provide evidence of a significant positive association between audit firm and level of disclosure. Such as, Singhvi & Desai (1971), Craswell & Taylor (1992), Ng & Koh (1994), Ahmed (1996), Suwaidan (1997), Patton & Zelenka (1997), Inchausti (1997), Naser et al (2002), Camfferman & Cooke (2002) (UK), and Xiao et al (2004).

On the other hand, Wallace & Naser (1995) provide evidence of a negative association. However, other prior studies, such as Firth (1979), McNally et al (1982), Malone et al (1993), Wallace et al (1994), Hossain et al (1994), Raffournier (1995), Depoers (2000), and Camfferman & Cooke (2002) (Dutch) found no significant association between audit firm and level of disclosure.

In Egypt, international accounting firms can only operate through an Egyptian partner. In addition, the audit profession and auditor independence have been well regulated since the

1950s.The argument that large audit firms are more independent, stricter with their clients and more sensitive to their reputation than small audit firms, can apply to large local and international firms. (Abd-Elsalam, 1999)

H3.3.c *There is an association between audit firm and the level of voluntary disclosure in annual reports of the most active Egyptian listed companies.*

6.5 Summary and conclusion

The previous chapters provide an outline of the theoretical section in the current study while the following chapters will present the empirical section. The current chapter, with chapter five, helps in making a link between the theoretical and empirical sections. According to the deductive approach indicated in chapter five and based on the proposed theoretical framework in chapter four, the Egyptian environment in chapter three and the evidence from disclosure literature in chapter two, three main hypotheses related to corporate governance characteristics, ownership structure and firm characteristics have been developed in the current chapter. Moreover these main hypotheses have been divided to a number of sub-hypotheses that will be tested in the chapter 8 to answer the third research question. The next chapters show the empirical section of the current study. before dealing with the hypotheses testing in chapter eight, chapter seven will present a descriptive analysis of the results of disclosure checklist to answer the first two research questions: what is the extent of voluntary disclosure practice in corporate annual reports and how it evolves over time in the Egyptian capital market

Chapter Seven: Voluntary Disclosure Practices in Corporate Annual Reports: Descriptive Analysis

7.1 Introduction

As indicated in chapter five, the current study developed self constructed checklist as a research instrument to measure the extent of total voluntary disclosure and its categories. Reviewing the literature revealed the importance of subdividing the total voluntary disclosure into subgroups. To understand the voluntary disclosure practice, it may be better to look in depth into the results of the score sheet. The self constructed checklist consists of 46 information items classified into seven groups that serve different stakeholders. The current chapter deals with the first two research questions which are:

RQ1: To what extent do Egyptian listed companies disclose more information voluntarily in their annual reports?

RQ2: How do voluntary disclosure practices in the annual reports of Egyptian listed companies evolve over time?

It provides answers for these questions through a detailed analysis of the results of the checklist. It adopts hierarchical analysis, starting with the total voluntary disclosure, moving to its categories and then to information items. The chapter starts with the assessment of the reliability and validity of the checklist using the relevant statistical tests in section 7.2. Then it deals with the extent and the trend of total voluntary disclosure over the period of the study in section 7.3. The analysis of the extent and the trend of voluntary disclosure according to its categories and items are reported in section 7.4 and section 7.5. The chapter ended with Summary and conclusion which are provided in section 7.6.

7.2 Assessment of reliability and validity of disclosure index

To assess the goodness of a measure one should consider its reliability and validity. While reliability focuses on accuracy in measurement, validity refers to whether we are measuring the right thing, i.e. the intended concept. As indicated before, the current study employs disclosure index as a research instrument to measure the extent of voluntary disclosure practices in the annual reports, as an intended concept.

The reliability of a measure is an indication of the stability and consistency with which the instrument measures the concept and helps to assess the goodness of a measure. While stability refers to the ability of the measure to repeat the same results over time with low vulnerability to changes in the situation, consistency indicates how well the items measuring a concept hang together as a set. (Sekaran, 2003) There are different forms of reliability: test retest, Parallel form reliability, inter-coder reliability, and internal consistency. Parallel form reliability needs two comparable forms that have similar items and the same response format but with different words and different sequence of the questions. This form of reliability focuses on the error variability resulting from wording and ordering of the questions. Inter coder reliability requires more than one coder which is impractical in the current study which is considered to be individual project. However, test – retest reliability can be used to examine stability while consistency can be measured by internal consistency reliability.

Validity represents evidence that the instrument, technique or process used to measure a concept does indeed measure the intended concept (Sekaran, 2003, p.425). Three common types of validity can be identified: content validity, criterion–related validity, and construct validity.

Content validity ensures that the measure includes an adequate and representative set of items that tap the concept. Several ways can be employed to attest the content validity, for example careful definition of the research through the literature review and using a panel of judges. In this regard face validity is considered as a basic and a very minimum index of content validity. (Sekaran, 2003 and Saunders et al 2007)

Sekaran (2003: P.206) states that 'criterion related validity is established when the measure differentiates individuals on a criterion it is expected to predict'. There are two types of criterion related validity, concurrent validity and predictive validity. Concurrent validity is established when the measure discriminates different individuals. Predictive validity refers to the ability of the measure to make accurate predictions, i.e. differentiate among individuals with reference to a future criterion. However, content validity is seen as not sufficient to conclude the validity of a measure. Moreover, criterion related validity is not often used with social science measures (Hassan, 2006).

The third type of validity is construct validity that shows 'how well the results obtained from the use of the measure fit the theories around which the test is designed' (Sekaran, 2003, p.207). As such construct validity focuses on the consistency with theoretical expectations and evidence from literature. In the context of disclosure, the correlation between disclosure scores and significant explanatory variables in prior studies has been used to validate the disclosure index (for example Hussainey 2004).

Based on the above discussion, the current study tests stability and consistency of the disclosure index using test retest reliability and statistical tests of internal consistency reliability. It may worth to notice that an examination of the internal consistency of the disclosure index provides some insights into the validity of the disclosure scores

(Hussainey, 2004). However, the validity of disclosure index is assessed by content validity (see section 5.5) and construct validity.

Test retest reliability: investigating the four years enhances the reliability of the disclosure index. For the consistency purposes, we started with careful reading to the entire annual report of each company to identify the non applicable items. Then we read it again to identify the allocated score for each company. We examined the available annual reports of all companies year by year. We started with the year 2003. After scoring the annual reports of the first two years, we re-examine the annual report of the first year. The rationale of this procedure is to allow time between the first examination and the second one. We repeat this procedure with the annual reports of the years 2004, and 2005 which were re-examined after scoring the voluntary disclosure of the years 2005 and 2006 respectively. The annual reports of the year 2006 have been re examined after the second examination of the year 2005. The correlation coefficients between the first and second rounds confirm the stability of our research instrument.

Internal consistency reliability: Reliability of the scale is basically measured through correlation coefficients and Cronbach's alpha and Guttman coefficients. Item-to-total correlations help to assess the internal consistency reliability, while Cronbach's alpha and Guttman concern with the measure as a whole. Reliability and validity assessments were conducted on the entire data set for the total voluntary disclosure score as well as categories scores. A summary of results can be shown in the following tables.

Item to sub-total (group score) correlations

Table 7-1 Correlation Coefficients and Significances Between Items and Total Group Score (General Information)

Item		X11	X12	X13	X14	X15	X16	X17
Correlation Coefficient	Pearson	0.644	0.018	0.199	0.371	0.583	0.327	0.677
	Spearman	0.627	0.007	0.206	0.390	0.588	0.316	0.653
Sig.		0.000	0.928	0.005	0.000	0.000	0.000	0.000

Table 7-2 Correlation Coefficients and Significances Between Items and Total Group Score (Financial Information)

Item		X21	X22	X23	X24	X25	X26
Correlation Coefficient	Pearson	0.529	0.514	0.756	0.614	0.260	0.417
	Spearman	0.530	0.471	0.783	0.610	0.253	0.390
Sig.		0.000	0.000	0.000	0.000	0.001	0.000

Table 7-3 Correlation Coefficients and Significances Between Items and Total Group Score (Non financial Information)

Item		X31	X32	X33	X34	X35	X36
Correlation Coefficient	Pearson	0.519	0.498	0.506	0.460	0.110	0.254
	Spearman	0.515	0.488	0.502	0.459	0.117	0.240
Sig.		0.000	0.000	0.000	0.000	0.095	0.001

Table 7-4 Correlation Coefficients and Significances

Between Items and Total Group Score (Future Information)

Item		X41	X42	X43	X44	X45	X46
Correlation Coefficient	Pearson	0.742	0.445	0.466	0.274	0.479	0.427
	Spearman	0.688	0.435	0.505	0.224	0.464	0.378
Sig.		0.000	0.000	0.000	0.002	0.000	0.000

Table 7-5 Correlation Coefficients and Significances

Between Items and Total Group Score (Corporate Governance)

Item		X51	X52	X53	X54	X55	X56	X57	X58
Correlation Coefficient	Pearson	0.390	0.705	0.864	0.063	0.505	0.723	0.876	0.811
	Spearman	0.552	0.776	0.633	0.130	0.364	0.512	0.730	0.544
Sig.		0.000	0.000	0.000	0.079	0.000	0.000	0.000	0.000

Table 7-6 Correlation Coefficients and Significances

Between Items and Total Group Score (Shareholders Information)

Item		X61	X62	X63	X64	X65	X66
Correlation Coefficient	Pearson	0.570	0.398	0.443	0.239	0.280	0.599
	Spearman	0.612	0.326	0.369	0.239	0.267	0.605
Sig.		0.000	0.000	0.000	0.001	0.000	0.000

Table 7-7 Correlation Coefficients and Significances Between Items and Total Group Score (Social Responsibility)

Item		X71	X72	X73	X74	X75	X76	X77
Correlation Coefficient	Pearson	0.575	0.618	0.367	0.454	0.516	0.494	0.522
	Spearman	0.595	0.598	0.376	0.474	0.472	0.457	0.511
Sig.		0.000	0.000	0.000	0.000	0.000	0.000	0.000

As can be seen from the above tables most items have significant correlation with their group score at 1% significance level and some items are significantly correlated with their group score at significance level 10%. However, table 7-1 indicates that item X12 has insignificant correlation with its subgroup. Before excluding an item one should consider its correlation with total score.

Item to total (TVD score) correlations:

The correlation coefficients between each item and the total score of disclosure index have been calculated. The results indicate that most items are correlated with TVDS. Item X12 was found significantly correlated with total score. However, correlation coefficients indicate that some items have no significant correlation with the TVDS; namely: X13 – X32 – X35 – X45 – X54 – X64 - X65. It can be noticed that these items are significantly correlated with their group score. As such all items in the scale have significant correlation with their subgroup score or/and the total score. The reason to exclude any item is the lack of significant correlation between this item and both of its subgroup score and the TVDS. Therefore, it was decide to keep all items in the checklist.

Statistical measures for total reliability

One of statistical measures that commonly used to assess the consistency and reliability is Cronbach's alpha. It is a reliability coefficient that indicates how well items in a set are positively correlated to one another. It is computed based on the average inter correlations among the items measuring the concept. The closer Cronbach's alpha is to 1, the higher the internal consistency reliability (Sekaran 2003). Examples of disclosures studies that employed Cronbach's alpha include Hassan et al (2006) and Lapointe-Antunes et al (2006). The current study uses Cronbach's alpha in addition to Guttman's coefficient as reliability measures. These measures of reliability were done for the seven groups and for the complete list of items. Table 7.8 shows the results of the reliability of subgroups as follows:

Table 7-8 Reliability tests - subgroups

Groups	No. of items	group-test correlation	Chronbach's Alpha	Alpha if group Deleted	Guttman's Coefficient
G1: General Information	7	0.7982	0.8575	0.825	0.875
G2: Financial Information	6	0.7981		0.826	
G3: Non-financial Information	6	0.5622		0.861	
G4: Future Information	6	0.7241		0.839	
G5: Corporate Governance	8	0.8545		0.820	
G6: Shareholders Information	6	0.4951		0.866	
G7: Social Responsibility	7	0.8583		0.813	

As indicated in the above table Cronbach's alpha is about 86% and Guttman's coefficient is about 88%. These results reveal that the scale has a high degree of reliability. In addition, Cronbach's alpha and Guttman's coefficient were computed also for the complete list of items, 46 items and 182 cases. The results confirm the high degree of internal consistency reliability of our scale, Chronbach's Alpha is 0.849 and Guttman's coefficient is 0.865.

Construct validity

Sekaran (2003) indicates that correlational analysis is a way in which construct validity can be established. Correlation coefficients have been used in prior disclosure studies to assess the validity of disclosure scores, for example Hussainey (2004) and Cheng and Courtenay (2006). Following these studies, we conducted correlation analysis of total voluntary disclosure score and its components, i.e. the sub groups. Table 7-9 presents both Pearson and Spearman correlation coefficients, and Significances, between sub groups and total voluntary disclosure score.

The results in table 7-9 indicate that all subgroups are highly correlated with total voluntary disclosure score. This indicates how well the grouping scheme interprets the total score. Moreover, it is expected that disclosure strategies of a company are similar over the different categories or sub groups of voluntary disclosure (Botosan, 1997 and Cheng and Courtenay, 2006). The results in table 7.9 reveal that the subgroups are also correlated with each other. Taken together the results confirm that the disclosure index consistently captures voluntary disclosure practices in the annual reports.

Table 7-9 Correlation analysis of disclosure scores

	TVDS	GI	FI	NFI	FUT	CG	SHI	SRI
TVDS	1							
GI	0.7982* (0.7596*)	1						
FI	0.7642* (0.8001*)	0.5463* (0.5216*)	1					
NFI	0.5620* (0.5584*)	0.3730* (0.3360*)	0.4325* (0.3880*)	1				
FUT	0.6969* (0.6332*)	0.5588* (0.5546*)	0.4220* (0.3866*)	0.2561* (0.2405*)	1			
CG	0.8499* (0.7598*)	0.6599* (0.5868*)	0.5295* (0.5721*)	0.3149* (0.3285*)	0.5974* (0.4875*)	1		
SHI	0.5100* (0.4787*)	0.3053* (0.2916*)	0.3050* (0.3121*)	0.1079 (0.1084)	0.2322* (0.2050*)	0.3739* (0.2726*)	1	
SRI	0.8594* (0.8635*)	0.5755* (0.5548*)	0.6202* (0.6400*)	0.4369* (0.4463*)	0.5330* (0.4722*)	0.6818* (0.6233*)	0.4143* (0.3787*)	1

*significant at 5%

Where: TVDS total voluntary disclosure score, GI general information, FI financial information, NFI non financial information, FUT future information, CG corporate governance information, SHI shareholder information, SRI corporate social responsibility

To attest construct validity of the disclosure index correlation analysis was carried out between total voluntary disclosure score and the key firm characteristics documented in prior disclosure studies. As indicated in chapter two the majority of disclosure literature report that firm size and listing status are the key determinants that explain the variation in disclosure practices. However, Hassan et al (2006) reported that profitability has a positive association with disclosure practices in the annual reports of Egyptian listed companies. Therefore we decided to investigate the correlation between total voluntary disclosure score and the three firm characteristics. Table 7-10 presents Pearson and Spearman coefficients.

Table 7-10 Correlation coefficients and significances between total voluntary disclosure and firm characteristics

	Firm size	Listing status	profitability
Pearson Correlations	0.6941*	0.5416*	0.4396*
Spearman's rho	0.5841*	0.4718*	0.4232*

*significant at 1%

Based on the above discussion, it can be said that our disclosure index has a considerable degree of reliability and validity that provides credibility and enable us to carry out the empirical section in the current study.

7.3 The extent and trend of total voluntary disclosure

To measure the extent of total voluntary disclosure in annual reports of the most active Egyptian listed companies we constructed a checklist of 46 items classified into seven groups. 182 annual reports of 64 non financial companies for the years from 2003 to 2006 have been analyzed using this checklist. The percentage of awarded disclosure score to the applicable score represents the extent of voluntary disclosure; the dependent variable in the current study. The voluntary disclosure scores over the four years provide the trend of voluntary disclosure practice in the annual reports.

To start our analysis, table 7.11 presents the descriptive statistics of the total voluntary disclosure and its categories for each year and for the four years all together. The panel A in the table 7-11 indicates that the mean of total voluntary disclosure score (TVDS) over the four years is about 31%. This average suggests a low level of voluntary disclosure which is to be expected. This low amount of voluntary disclosure could be explained on the basis of its nature and the absence of enforcement to disclose (Alsaeed, 2006).

The table shows that the extent of voluntary disclosure over the four years has a wide range. While the minimum disclosure index obtained is 6.82% for the year 2003, the maximum is 76.09 for the year 2006. This wide range of voluntary disclosure level can be noticed also in each year of the investigated period. Although the minimum score of voluntary disclosure increased from 6.82% in 2003 to 9.1% for the following years, it is still under 10%. On the other hand, the maximum total voluntary disclosure score has been increased over the years. It was 58.7% for the year 2003, 60.87% for the year 2004, 65.22% in 2005, and 76.09% for the year 2006. This result confirms the wide variation in the voluntary disclosure practices in the annual reports of the most active Egyptian listed companies. In addition, it supports our decision to focus the current study on the most active non-financial companies in the Egyptian capital market.

To shed more lights on the voluntary disclosure practice in the annual reports of the Egyptian listed companies, panel B in table 7.11 presents the frequencies of the total score of voluntary disclosure. In 2003, 44 companies of 46 companies (96%) disclosed less than 50% of the checklist. The remaining two companies (4%) scored 50% and 58.7% respectively. There was an improvement in the following years. Four companies, of 45 companies, represent 9 %, eight companies (12.5%), and ten companies (22%) scored more than 50% over the years 2004, 2005, and 2006 respectively.

In average, 87% of our sample population, the most active non-financial companies, scored range less than 50% of the measure of voluntary disclosure. 57% of the sample attained voluntary disclosure score ranging from 20% to 40% of our checklist. Once more, this confirms the need to keep a degree of consistency among the companies investigated. It may be worth to mention that the company with the highest score in 2006 (about 76%) was awarded the 2006 best annual report in the competition organized by the Egyptian Institute of Directors (EIoD) and the International Finance Corporation (IFC).

Table 7.11

Panel A: Descriptive Statistics of Total Voluntary Disclosure (Dependant Variable)

Year	*N*	Mean	Minimum	Maximum	S.D.
2003	46	0.2847	0.0682	0.5870	0.1122
2004	45	0.2986	0.0909	0.6087	0.1305
2005	46	0.3216	0.0909	0.6522	0.1483
2006	45	0.3431	0.0909	0.7609	0.1749
Pooled	**182**	**0.3119**	**0.0682**	**0.7609**	**0.1261**

Panel B: Frequency of Total Voluntary Disclosure Score

TVDS	2003		2004		2005		2006		Pooled	
	No.	%	No.	%	No.	%	No.	%	No.	%
< 10	2	0.04	1	0.02	3	0.07	1	0.02	7	0.04
10 -19.99	7	0.15	8	0.18	5	0.11	8	0.18	28	0.15
20 - 29.99	17	0.37	16	0.36	16	0.35	13	0.29	62	0.34
30 - 39.99	13	0.28	11	0.24	9	0.20	8	0.18	41	0.23
40 - 49.99	5	0.11	5	0.11	5	0.11	5	0.11	19	0.11
50 - 59.99	2	0.04	3	0.07	5	0.11	5	0.11	15	0.08
60 - 69.99	0	0.00	1	0.02	3	0.07	4	0.09	8	0.04
> 70	0	0.00	0	0.00	0	0.00	1	0.02	1	0.01
Total	**46**	**1.00**	**45**	**1.00**	**46**	**1.00**	**45**	**1.00**	**182**	**1.00**

Although the average of voluntary disclosure is low, there is an increasing extent of total voluntary disclosure over the period of study as indicated in panel A, 28.47%, 29.86%, 32.16%, and 34.31% for the years 2003, 2004, 2005, and 2006 respectively. Figure 7.1 shows the extent of total voluntary disclosure for each of the years of the study. Figure 7.2

shows the trend of voluntary disclosure over the four years. This result can be explained by the recent development in the Egyptian capital market and the increasing awareness of the importance of transparency and corporate governance. As indicated in chapter three the top most active Egyptian listed companies play a distinct role to encourage all listed companies to be more transparent and to apply the best practices of corporate governance.

Figure 7.1 Extent of total voluntary disclosure

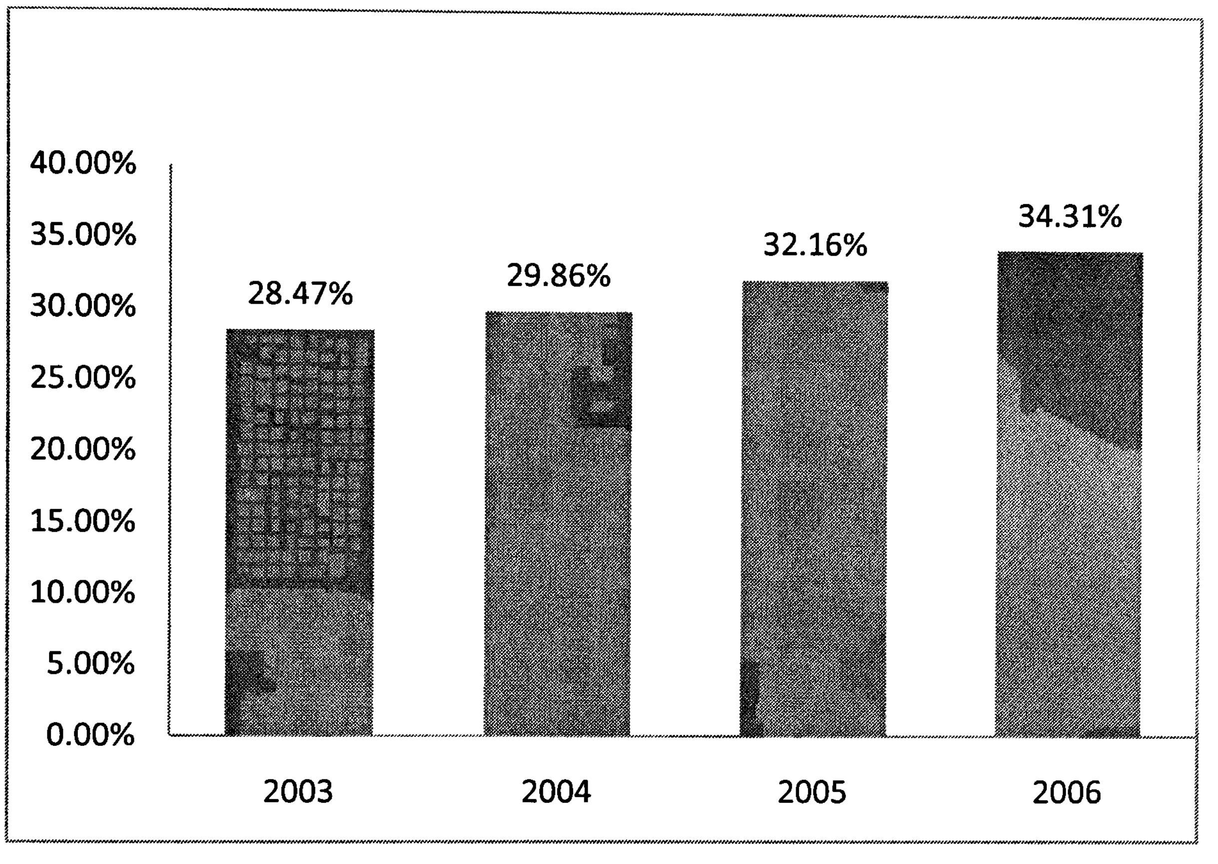
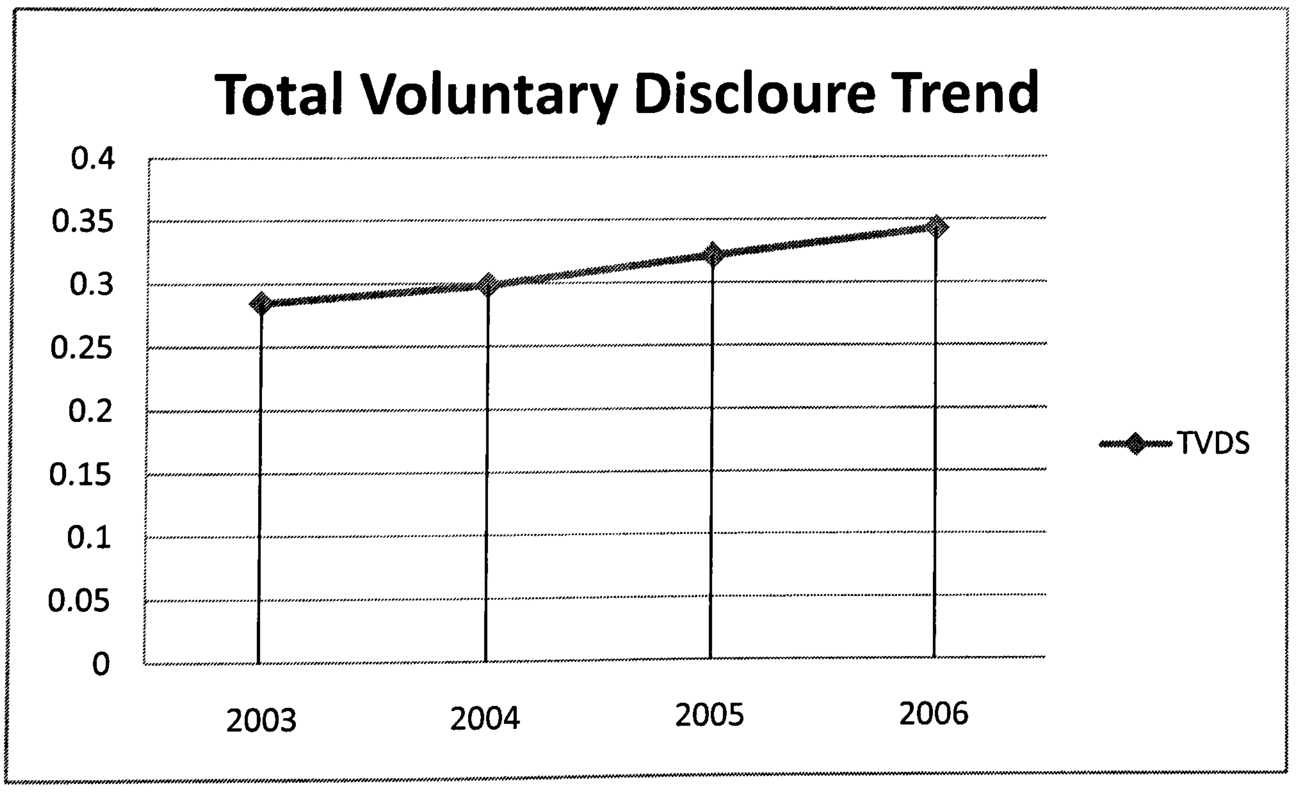


Figure 7.2 Trend of total voluntary disclosure



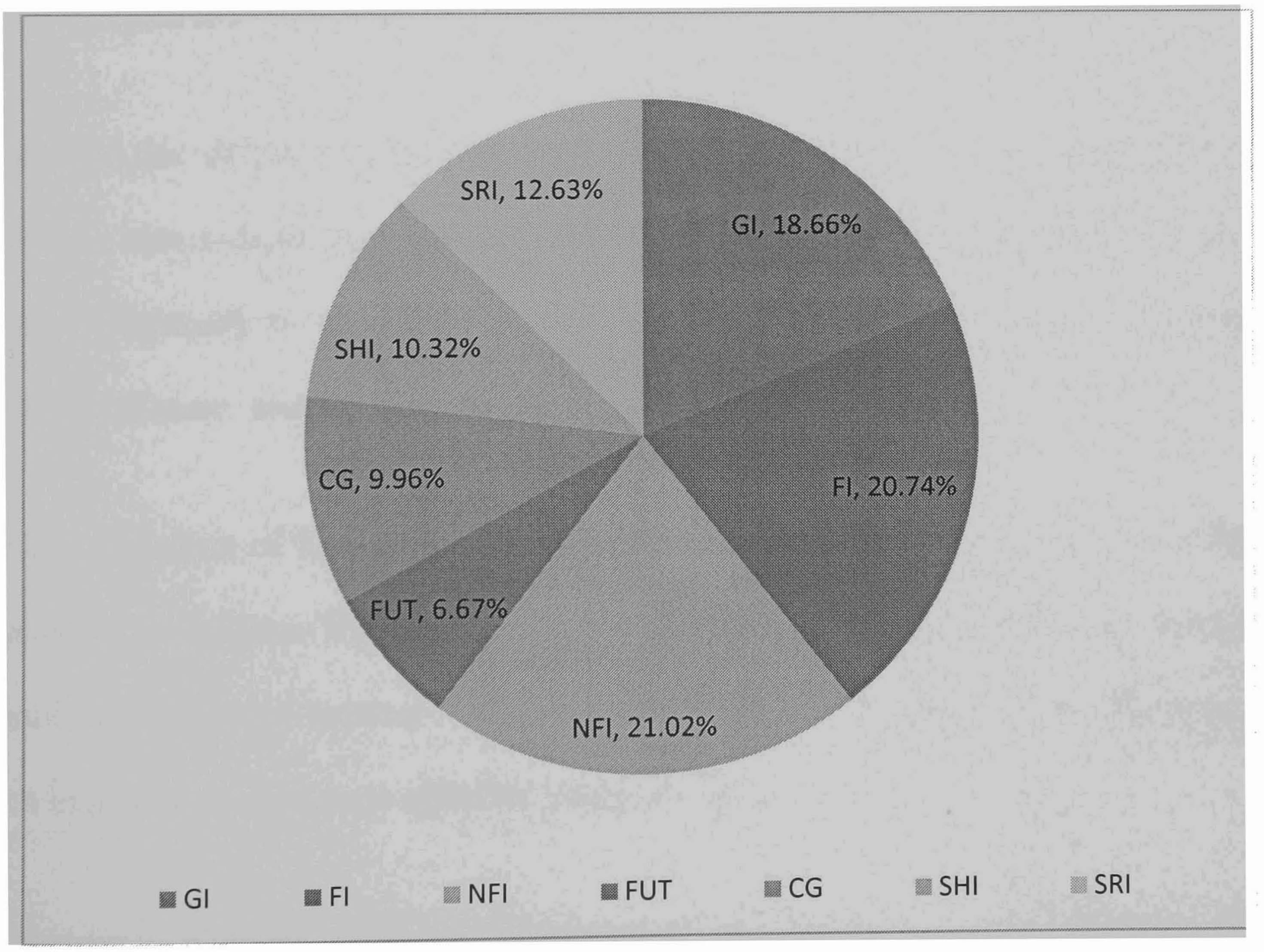
Moreover, as indicated in panel B, there is little number of companies who have the highest scores of voluntary disclosure. These companies may lead the Egyptian market and work as a bench marker for other companies. This continuous increase in the extent of voluntary disclosure over the period of current study can be explained based on the institutional theory, the concept of isomorphism. The active companies try to imitate or follow the best practice of the annual report disclosure to get the same image of the most active companies. The motivation and the characteristics of these companies will be discussed in the next chapter.

Giving the continuous increasing in the total voluntary disclosure practice, it may be better to look at the type of information that makes up this discretionary disclosure. However, section 7.4 will explain these categories in detail. Figure 7.3 shows the contribution of the different categories of discretionary information to the total voluntary disclosure score over the period of study. The pie chart illustrates that non-financial information, with average score 46.25%, has the largest contribution to the total voluntary disclosure level, about 21%, over the period of the four years. Financial information and general information categories, with average scores 45.64% and 41.05% respectively, have the second and the third portion, 20.74% and 18.66% respectively.

While the average of corporate social responsibility information is about 28%, the average of shareholders information and corporate governance information are about 23% and 22% respectively. The portions of the three categories of voluntary disclosure are 12.63%, 10.32, and 9.96% respectively. On the other hand, information about the future and prospects, with average score 14.67%, has the lowest proportion in the total voluntary disclosure score, 6.7%. The low level of future information disclosure is considered to be reasonable due to the cultural impact. Zarzeski (1996) provides evidence of cultural influence upon accounting, specifically the secretiveness of a culture relates to the level of disclosure. Egypt has uncertainty avoidance and a secretive culture (Dahawy and Conover, 2007) which may affect the extent of voluntary disclosure. The conservatism policy is deeply rooted in the Egyptian culture (Abd-Elsalam and Weetman 2007).

Comparing with prior disclosure studies, our results are comparable to the results from other developing countries (e.g. 28% in Saudi market, Naser and Nuseibeh, 2003 and about 31% in the Malaysian capital market, Haniffa and Cooke, 2002, Ghazali and Weetman, 2006). However, caution must be taken into consideration when one makes such comparisons. In addition to different institutions in each of these developing countries, the sample, time of study, the checklist and its components are also different.

Figure 7.3 Extent of voluntary disclosure categories of the four years



Given that total voluntary disclosure score increase over time, it may be helpful to test whether there is significant difference between total voluntary disclosure scores over the period under investigation. To test whether the observed changes in the TVDS over the period of study are statistically significant or not, a series of statistical tests have been conducted. First, Skewness-Kurtosis and Shapiro-Wilk normality tests have been done for all variables representing group scores and TVDS. Testing for normality is essential to determine the type of tests to be used (parametric tests or non-parametric tests). The results indicate that voluntary disclosure scores are not normally distributed, so nonparametric tests is recommended. Secondly, the issue of independence; i.e. independent samples or related samples; should be assessed. In our case, the four years represent the groups. The 50 most active companies differ from year to year. Based upon the above, it was decided to use non-parametric tests for both of independent samples (Kruskal-Wallis and Mann-Whitney tests) and dependent samples (Friedman and Wilcoxon Signed Ranks tests).

Regarding the differences between the four years, results of both Kruskal-Wallis and Friedman tests indicate that there is no significant difference between TVDS over the four years. Additionally we investigated if there is a significant difference in the TVDS between each pair of years, and the result was the same.

To test the effect of Egyptian Code of corporate governance on the extent of voluntary disclosure, both Mann-Whitney and Wilcoxon Signed Ranks tests indicate that there is no significant difference between TVDS before and after the Egyptian code. However, the code may need some time to affect the disclosure practices.

In summary, although there was increasing in the extent of total voluntary disclosure throughout the four years, this increase was not sufficient to be statistically significant.The following section presents descriptive analysis of the extent and the trend of each category of voluntary disclosure practice.

7.4 The extent and trend of voluntary disclosure categories

Table 7.12 indicates the variation in the level of voluntary disclosure categories over the period of study. It may be worth analyzing the extent and trend of each category. To do this, we start with the average score of each category in each year and over the four years. Such analysis provides a clear understanding to the disclosure policy that active companies prefer to apply and the changes in this policy. In addition, it helps in understanding the effect of culture on the disclosure decision. It can be seen from table 7.12 that there is gradual increasing in the average score of each of the seven groups. However, the increasing rate differs among the categories. For example, while the increasing rate in the general information was 1.43%, 0.88%, and 3.77% for the years 2004, 2005 and 2006, the increasing rate in corporate governance information was 9.97%, 12.98% and 24.67% for the same years.

However, the structure of total voluntary disclosure is similar in each of the four years. For the year 2003, the category of nonfinancial information has the highest score, about 46%, followed by financial information (42%), general information (40%), social responsibility information (22%), shareholders information (19.5%), corporate governance information (17.9%), and future information (12.6%). The same structure was found in the years 2004 and 2005. There was a little change in the year 2006; financial information has the highest portion (48.89%) followed by non financial information (46.7%). Moreover, there is a considerable increase in the category of corporate governance information after issuing the Egyptian code of corporate governance in 2005. Corporate governance information in the annual reports scored about 28% for the year 2006 while its score in 2005 was about 22%

which implies the highest increasing rate 24.67%. However, forward looking information has the lowest mean in all years, ranging from 12.6% in 2003 to 16.6% in 2006. Once again, this is not an unexpected result. Secretive and conservative culture may be reasonable explanation.

Figure 7.4 shows the bar chart of the seven categories over the four years. The figure indicates the consistency of the voluntary disclosure structure over years. Although the continuous increase in the extent of each category, there is no great change in the voluntary disclosure policy. This suggests that the most active Egyptian listed companies manage their voluntary disclosure policy. Moreover, the voluntary disclosure decision in these companies tries to deal with the information needs of different stakeholders. However, these results indicate that there is a room to increase the extent of disclosure in the annual reports of Egyptian listed companies. These findings may motivate all interested parties in the Egyptian capital market, especially Capital Market Authority (CMA), to provide the relevant incentives that encourage the listed companies to disclose more information voluntarily especially in the areas that may be affected by culture and therefore has the low score such as forward looking information and corporate governance information.

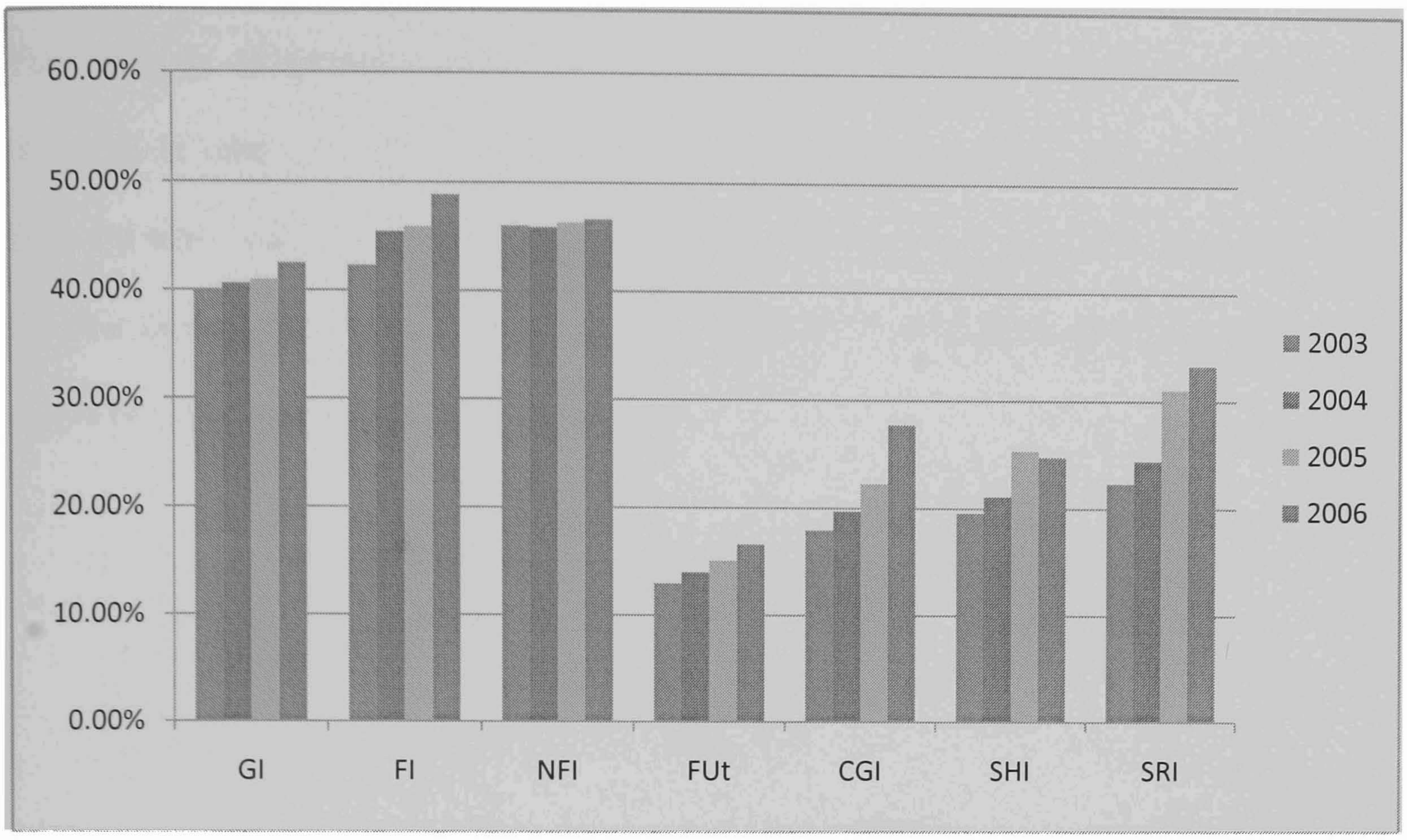
Familiarity was identified as a possible reason for non compliance with mandatory disclosure requirements in Egypt (Abd-Elsalam and Weetman, 2003). The same concept may be more applicable with voluntary disclosure practices. Egyptian listed companies may suffer from the lack of familiarity with the concept and the requirements of corporate governance. Providing examples of corporate governance disclosure may help in justifying the big increase in the average of corporate governance information in the year 2006. The same apply with social responsibility information in years 2005 and 2006. In this regard new institutional theory, the concept of isomorphism, may provide theoretical explanation to the increasing trend of voluntary disclosure practices. Companies with cross listing and / or foreign members on the board may be more familiar with the disclosure pattern of developed countries and with the best practice of corporate governance. Such companies may work as a bench marker. However, next chapter will examine the association of such variables with voluntary disclosure.

Table 7-12 Extent of voluntary disclosure and its categories

Year	2003	2004	2005	2006	Pooled
General information (GI)	40.06	40.63	40.99	42.54	**41.05**
Financial information (FI)	42.32	45.48	45.94	48.89	**45.64**
Non financial information (NFI)	46.01	45.93	46.38	46.67	**46.25**
Future Information (FUI)	12.61	14.00	15.14	16.59	**14.58**
Corporate Governance Information (CG)	17.93	19.72	22.28	27.78	**21.91**
Shareholders Information (SHI)	19.57	21.11	25.36	25.19	**22.80**
Social Responsibility Information (SRI)	22.36	24.44	31.06	33.33	**27.79**
Total Voluntary Disclosure (TVDS)	**28.47**	**29.86**	**32.16**	**34.31**	**31.19**

The observed changes in voluntary disclosure score of the different categories raise question about the statistical significance of these changes. To address this question we applied the same statistical tests indicated in section 7.3 to each of the seven categories of voluntary disclosure. Normality tests show that voluntary disclosure scores for the first three categories were found to be normally distributed and the scores of the remaining categories as well as the TVDS were not normally distributed.

Figure 7.4 Extent of voluntary disclosure categories



For the seven categories, none of the statistical tests used (t-test was also used here as a parametric test for differences between paired/related samples) revealed any significance difference in the voluntary disclosure score over the period of study and also before and after issuing the Egyptian Code of corporate governance. This confirms that companies manage their disclosure policy. The following section presents in more details the results of each item in the different categories of voluntary disclosure.

7.5 Descriptive analysis of the items of voluntary disclosure

This section analyzes the results of the checklist by items disclosed in each category. As indicated before the checklist consistent from 46 information items classified into seven groups. The following paragraphs provide descriptive analysis of the items disclosed in each category.

7.5.1 General information

The category of general information contains seven voluntary information items. As indicated in table 7.12, the average of general information is about 41%. It can be seen from the table that there is relative stability in the extent of this type of information over the first three years. A low increasing rate can be noticed in the year 2006. Figure 7.4 shows the disclosure extent of this category.

Figure 7.5 Extent and trend of general information

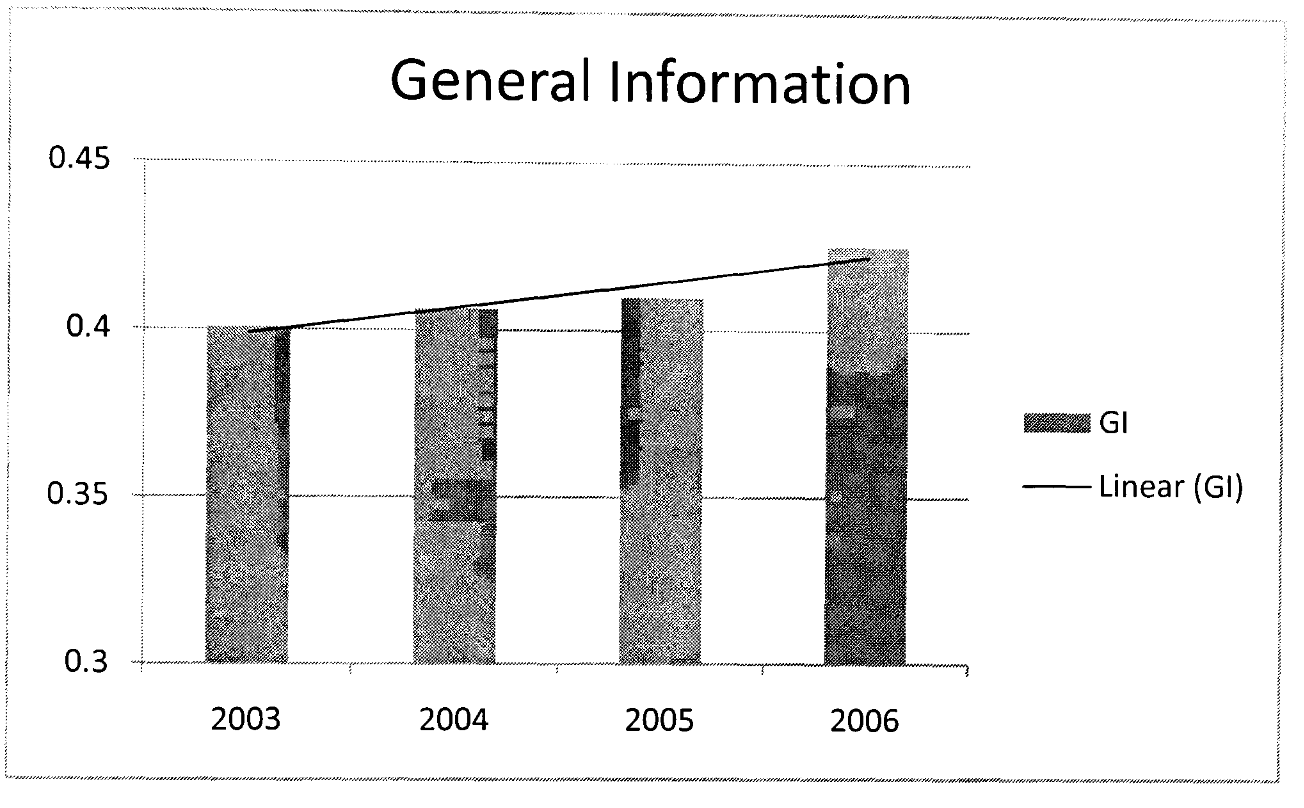


Table 7.13 presents the frequency of each item disclosed in this category. It can be seen from the table that the highest average relates to information on the main projects and products. Overall, the mean over the four years is about 73%. 133 annual reports of 182 annual reports investigated in the current study include this item in the annual reports. This implies that companies are willing to notify the stakeholders about the main projects, products, warehouses that may add to the firm value. The reason for disclosing such information may be to advertise these products and to enhance the corporate image. Referring to the secretive and conservative nature of Egyptian culture, disclosing

information about the main products and projects may be considered as a signal to the stakeholders about the future and the possibility to continue and growth.

The second highest score was awarded to the overview of trends in industry. The mean of this item is 63.74%. 116 of 182 observations disclose information about the general trend in the industry. Relatively, the highest average was for the year 2003, 65.22%. The difficulties that Egyptian economy has faced during this year may explain this higher average. The third rank in this group is for productive capacity which has mean 45.6%.

Moreover, table 7.13 shows that 26.92% of our sample discloses voluntarily information about the corporate strategy. Information on the competition has average score 41.21%. it can be seen from the table that the mean of this item has increased from 34.78% in 2003 to 44.44% in 2006. This may reflect the increasing competition degree in the Egyptian market in recent years. Using English language in the annual reports has mean 26.37%. The lowest score was for information related to the organizational structure. About 10% of our sample includes such type of information in their annual reports.

Table 7.13 Frequencies of general information items

No	Items	2003		2004		2005		2006		Pooled	
		average	sum	average	sum	average	sum	average	sum	average	sum
1.1	Statement of corporate Strategy.	23.91	11	26.67	12	28.26	13	28.89	13	26.92	49
1.2	Information on the principal products, project	71.74	33	75.56	34	76.08	35	68.89	31	73.07	133
1.3	Productive capacity.	47.83	22	46.67	21	41.30	19	46.67	21	45.60	83
1.4	An overview of industry.	65.22	30	62.22	28	63.04	29	64.44	29	63.74	116
1.5	Information on competitive environment.	34.78	16	44.44	20	41.30	19	44.44	20	41.21	75
1.6	Organizational structure.	10.87	5	8.89	4	8.70	4	11.11	5	9.89	18
1.7	Presenting annual reports in Arabic and English.	26.09	12	20.00	9	28.26	13	33.33	15	26.92	49
	Total General information %	**40.06**		**40.63**		**40.99**		**42.54**		**41.05**	

Table 7.14 Frequencies of financial information items

No	Items	2003		2004		2005		2006		Pooled	
		average	sum	average	sum	average	sum	average	sum	average	sum
2.1	Historical data & statistics for more than 2 years	43.48	20	53.33	24	50.00	23	46.67	21	48.35	88
2.2	Any industry-specific ratios.	19.57	9	17.78	8	15.22	7	17.78	8	17.58	32
2.3	Using charts, Graphs, or figures.	43.48	20	51.11	23	54.35	25	55.56	25	51.10	93
2.4	Reasons, effects of acquisitions/disposals on corporste results.	84.21	16	78.26	18	70.83	17	80	20	78.02	71
2.5	Financial Ratios (profitability, leverage, liquidity and other ratios).	84.78	39	82.22	37	86.96	40	88.89	40	85.71	156
2.6	Amount spent on training.	8.70	4	11.11	5	15.22	7	24.44	11	14.84	27
	Total Financial review information %	**42.32**		**45.48**		**45.94**		**48.89**		**45.64**	

7.5.2 Financial information

The second category relates to financial information items. It contains six voluntary items. It can be seen in table 7.12 that the average of financial review information is 45.64%. The category of financial information has the second highest score over the four years. However, the findings indicate that this type of information has the highest score in the year 2006, the average score is 48.89%. These results are consistent with the recent review of the corporate governance disclosure practices among leading enterprises in Egypt (UNCTAD, 2007). Figure 7.6 shows the extent and the trend of this type of information over the period of our study. As indicated in table 7.12 and the figure 7.6, the year 2003 has the lowest mean of financial review information which is 42.32%. This may be explained in the view of the difficulties that Egyptian economy has faced over this period as indicated in chapter three.

Figure 7.6 Extent and trend of financial information

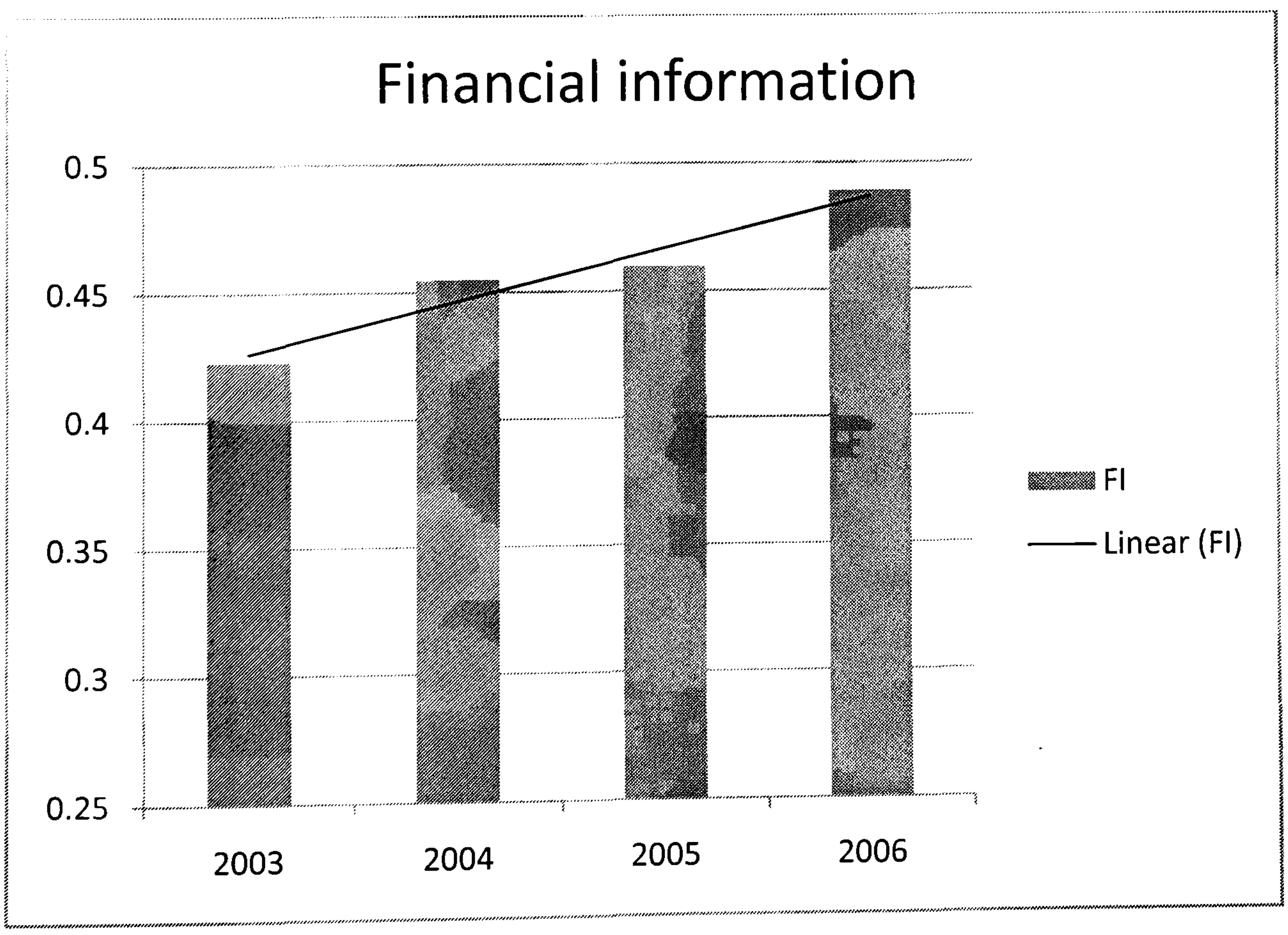


Table 7.14 presents the frequency of each item disclosed under this category. Not all companies have merger, acquisition or disposal. Therefore, the current study recognizes this issue when computing the score of disclosure to avoid any irrelevant penalty for investigated companies. It may be worth mentioning that the reported percentages are based on applicable items. It can be seen from the table that the highest average relates to financial ratios. The average of this item over the four years is 85.71%. 156 of 182 annual reports investigated in the current study include financial ratios, not just changes from the last year. As can be noticed in table 7-20, the findings indicate that the item of financial ratios disclosed has the first rank over the 46 items included in the checklist. The reason for this may be because such type of information is easy to understand and also easy to prepare. Moreover, the results imply that managers believe that financial ratios may help in satisfying the information needs of several stakeholders.

The second highest mean relates to information on the reasons and effects of acquisition, merger or disposal on the past results. The mean of this item is 78.02%, 71 annual reports of 91 applicable annual reports over the four years. In this regard, a number of investigated companies disclosed such information in the year of event and the years after. The reason for disclosing this information may be the management's desire to provide indicator to the effectiveness of changes that happened during the period of reporting and consequently the effectiveness of the managers' decision. In general, this item was ranked the third item of the highest disclosure items over the period of study, see table 7-20.

While about 51% of companies investigated in the current study use charts and graphs in the annual reports, 48.35% of our sample revealed financial information and statistics for more than two years. On the other hand, the lowest score is 14.84% which related to the amount spent on training. The second lowest score is 17.58% for disclosing industry ratios.

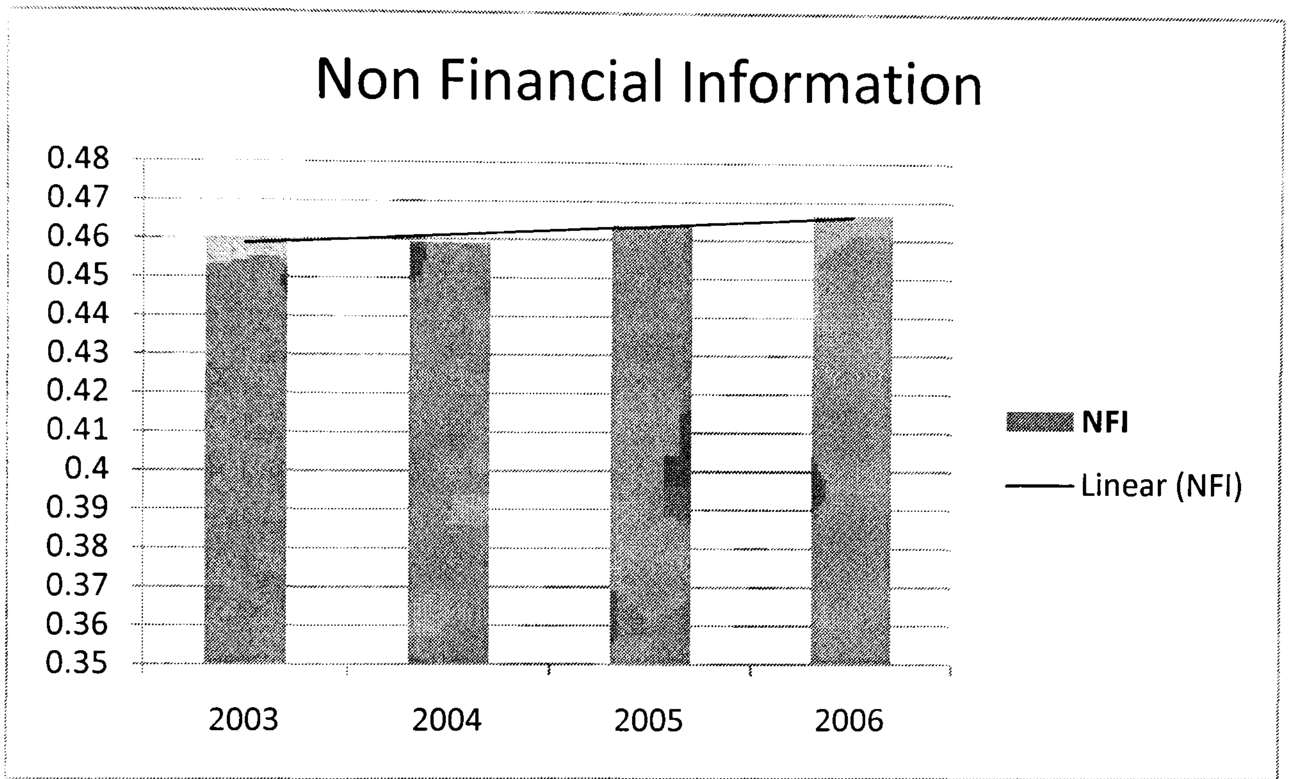
The reason for the low disclosure of these items may be attributed to the existence of other qualitative information related to these items. Mangers may prefer to disclose qualitative information more than quantitative, especially when the quantitative one will not add more to the corporate image.

7.5.3 Non financial information

With regard to the category of non-financial information, six voluntary information items are included under this type of information. These items cover different aspects and are considered to be relevant to different stakeholders. As indicated in table 7.12 the disclosure of non-financial information has the highest mean over the period of study. The average is 46.25% over the four years. The table also indicates that there is no wide variation in the extent of non-financial information disclosed in each of the four years of the study. The average of this type of disclosure is 46.01%, 45.93%, 46.38%, and 46.67% for the years 2003, 2004, 2005, and 2006 respectively. The mean is about 46% in each year. Figure 7.7 shows the extent of non financial information in each of the four years. These findings suggest a relative stability in the disclosure extent of such information. The reason for disclosing these items of information may be the desire of managers to response to the information needs of many stakeholders in addition to improve the image of their companies.

The frequency of items disclosed under this category of information is presented in table 7.15. As indicted in the table, information about human resources and training has the highest mean in each year and over the four years. Its average is ranging from 66.67% in year 2004 to 77.78% in year 2006. It can be noticed that Egyptian listed companies include their annual reports information on human resource and training. However, the results indicate a variation in items disclosed about the training. While about 38% of companies investigated reveal the number of employee trained over the period of reporting, only 14.84% of companies investigated, referring to table 7.14, reveal the cost of training, i.e. amount spent on training. Once again, this suggests that mangers may prefer the qualitative information more than quantitative information to send signals for stakeholders and legitimize their companies. Moreover, it calls for more research on narrative disclosure in emerging markets.

Figure 7.7 Extent and trend of Non financial information

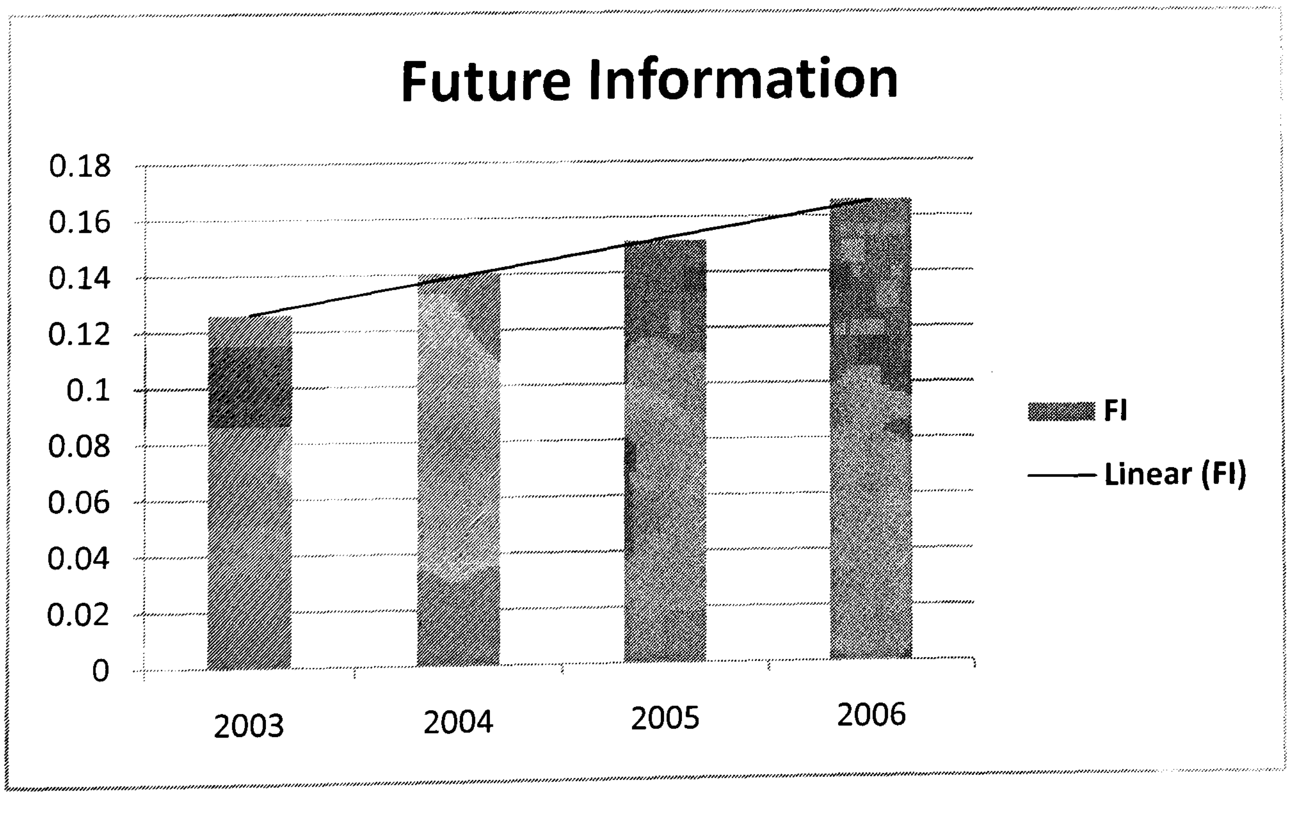


The second highest score under this category is 69.23% which is related to marketing information. As indicated in table 7.15, the mean of this item is ranging from 66.67% in year 2003 to 71% in year 2004. These results may reflect the management awareness of the importance of such information. Disclosing information related to principal markets may be used as a signal to stakeholders about the effectiveness of the company and its management. It may used also to demonstrate the available growth opportunities. Productivity indicator has scored about 49% over the four years. As shown in the table, there is decrease in the average of this item in 2006, 44.44%. This is can be viewed in general with the higher average of financial information in the same year 2006. In other words, this suggests that companies may manage their disclosure policy to keep a consistent level of disclosure over time. Information about research and development activities was scored in average 25%. It can be seen that there is increasing trend in the number of companies that revealed such type of information. However, the lowest average under this category relates to market share. The results indicate that 24.73% of the investigated companies, 45 of 182, disclose information about their market share.

7.5.4 Future information

As indicated before the forward looking information has the lowest average over the period of study, 14.58%. It scored also the lowest mean in each of the years of study, 12.61%, 14%, 15.14% and 16.59% in the years 2003, 2004, 2005 and 2006 respectively. However, the findings indicate a gradual increase over the four years. Figure 7.8 shows the extent and the trend of future information disclosed in the annual reports. To get more understanding of such type of disclosure, table 7.16 provides the frequency of future information items disclosed by investigated companies.

Figure 7.8 Extent and trend of future information



As shown in table 7.16, the most disclosed item is the effects of acquisitions or disposal on the future results, 41.75%. It may be worth to noting that the percentage of this item is based on the applicable item, 38 of 91 cases. While about 78% of the applicable annual reports investigated in the current study disclose information on the reasons and effects of acquisitions, merger and disposals on the past results, 41.75% only disclose information about the effects of such transactions on the future results. The reason for disclosing such item may be attributed to the management desire to improve the corporate image by revealing the expected outcome of its decision. However, the results indicate that companies prefer to reveal information about past results more than the future. In addition to the cultural impact, this may be attributed to competitive disadvantages. Managers may aim to avoid higher expectations by stakeholders and may tend of to be more careful about the adverse effects on their companies

Moreover, the table indicates that the second highest score under this category is related to the general discussion of future trends, 19.23%. This is followed by information on the projected production plan and capacity, about 17%, and future expansion and capital expenditure, 13.74%. Forecasting about market share and about earning and cash flow scored the lowest average, 9.34% and 4.4% respectively. These findings imply that companies are not willing to disclose quantitative forecasts. The reason for this low average may be due to the culture effects; the relatively high degree of uncertainty avoidance. Managers may prefer this disclosure practice, low or non disclosing more about future, to avoid any adverse effects of such type of disclosure. Moreover, one of the reasons behind the low level of future information disclosed in the annual reports may be because managers prefer to use other information such as information about main products and principal markets to signal the future; i.e. an indirect way to disclose looking forward information.

Table 7.15 Frequencies of Non financial information items

No	Items	2003		2004		2005		2006		Pooled	
		Average	Sum	average	sum	average	sum	Average	Sum	Average	sum
3.1	Market share.	28.26	13	24.44	11	21.74	10	24.44	11	24.73	45
3.2	Number of employees trained	41.30	19	44.44	20	36.96	17	31.11	14	38.46	70
3.3	Company policy on human resources & employee training.	69.57	32	66.67	30	67.39	31	77.78	35	70.33	128
3.4	Research and Development activities.	17.39	8	20.00	9	28.26	13	35.56	16	25.27	46
3.5	Productivity indicator.	50.00	23	48.89	22	54.35	25	44.44	20	49.45	90
3.6	Marketing network and the principal markets.	69.57	32	71.11	32	69.57	32	66.67	30	69.23	126
	Total Key non- financial statistics %	**46.01**		**45.93%**		**46.38%**		**46.67**		**46.25**	

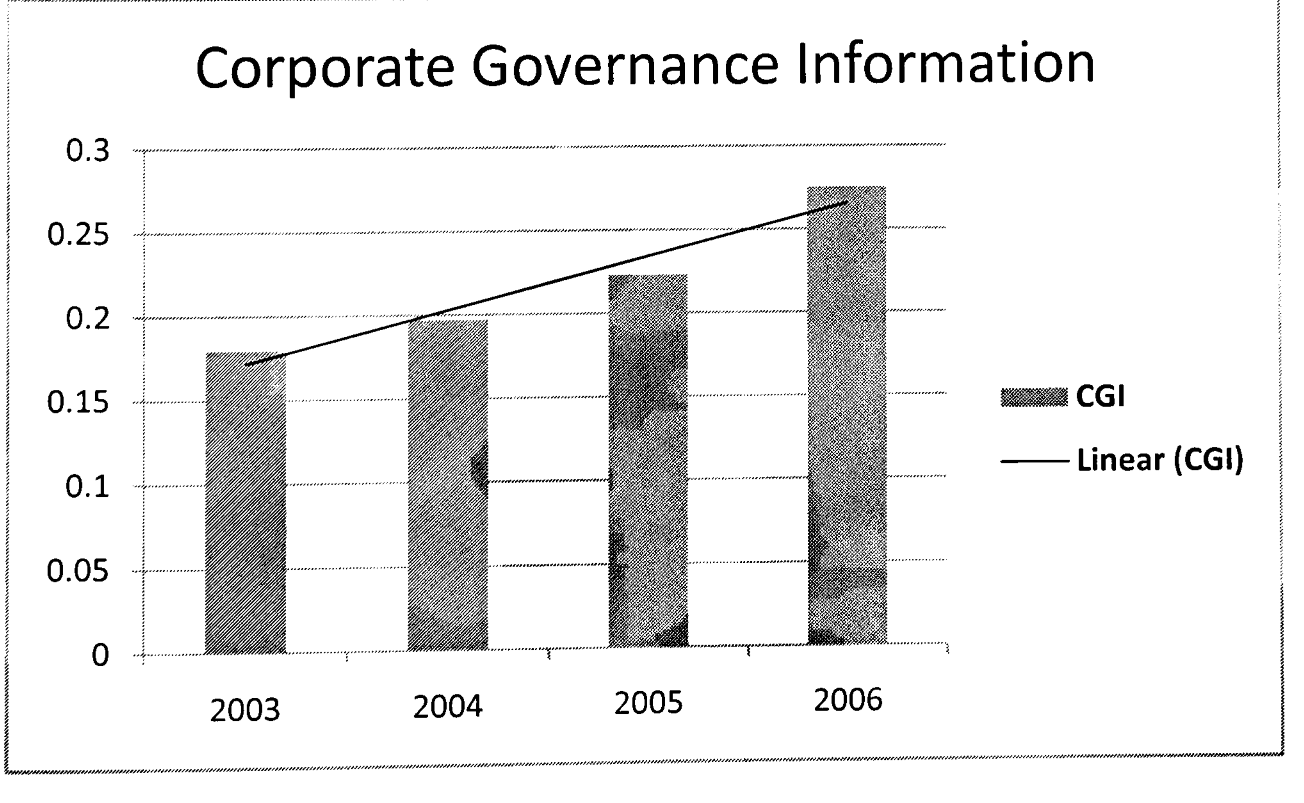
Table 7.16 Frequencies of future information

No	Items	2003		2004		2005		2006		Pooled	
		Average	Sum	average	sum	average	sum	Average	Sum	Average	sum
4.1	Effects of acquisition / disposals on future results	42.1	8	47.82	11	37.5	9	40	10	41.75	38
4.2	Future expansion and capital expenditure	10.87	5	13.33	6	15.22	7	15.56	7	13.74	25
4.3	General discussion of future trends	19.57	9	15.56	7	19.57	9	22.22	10	19.23	35
4.4	Information on earning or cash flow forecasts.	2.17	1	4.44	2	4.35	2	6.67	3	4.40	8
4.5	Information on production plan and capacity forecast.	17.39	8	13.33	6	17.39	8	20.00	9	17.03	31
4.6	Information on market share forecast	6.52	3	8.89	4	10.87	5	11.11	5	9.34	17
	Total Future information %	**12.61**		**14.00**		**15.14**		**16.59**		**14.58**	

7.5.5 Corporate governance disclosure

The category of corporate governance information contains eight voluntary information items. The disclosure of corporate governance practice is considered to be voluntary. Companies are not enforced to disclose such information. As indicated before, the Egyptian corporate governance code provides only guidelines of the best practice of corporate governance. Unlike other countries such as UK and Malaysia, the Egyptian code doesn't follow the rule of "comply or explain". The mean of this category of voluntary disclosure is 21.91% over the period of the current study. Although this low level of disclosure, the findings indicate a considerable increase in the extent of corporate governance disclosure over the examined period. The mean has increased from 17.93% in 2003 to 27.78% in 2006. This result is considered to be reasonable after issuing the new listing rules in 2002 and the Egyptian code of corporate governance in 2005. Figure 7.9 shows the extent and the trend of corporate governance disclosure in each of the four years.

Figure 7.9 Extent and trend of non-financial information



The reason for such big increase may be attributed to the lack of the disclosure pattern of corporate governance practices. As indicated in chapter three, corporate governance is a new concept in the Egyptian environment, there was no clear view of such concept and its principles. Most of Egyptian listed companies were unfamiliar and may look forward to having example from the top companies. Companies with cross listing or with foreign members on the board may be more familiar with corporate governance. As such, the concept of isomorphism may help in explaining the gradual increase over the time. In addition to the role of the top companies, issuing the Egyptian code of corporate governance in 2005 may help in interpreting the big increase in 2006 by reducing the unfamiliarity and providing the desired guidelines.

To get more understanding of the corporate governance disclosure practices, table 7.17 provides a closer analysis of the frequencies of disclosure items under this category. The table indicates that the list of board members has scored the highest score, 78.57%. Most of investigated companies include their annual report list of the names of board members. The second highest score relates to using photos of chairperson and other members in the annual reports, 34.62%. Disclosing such items may be attributed to the manger's desire to enhance their managerial reputation and to the familiarity with such item. About 19% of investigated companies include their annual reports statement about corporate governance policy and the extent of implementation, 14 companies in 2006 compared to 4 in 2004.

However, all other items under this category have scored low average. 13.19% of investigated annual reports were found to reveal information about the qualifications of the members of the board. Although the importance of audit committee in corporate governance, 9.34% of annual reports examined in the current study include information about the committee and its members. The same average was scored to information about the executive and nonexecutive directors. The lowest scores are attributed to information on shares held by board members and the compensation policy for top management; 2.75% and 8.79% respectively. The low level of disclosure of the compensation and shares held by directors in the annual reports may be attributed to considering this information; by managers; as private and confidential so there is no need to include it in the annual report which is for general purpose. Such information may be available on request for some specific stakeholders; but not for all of them.

The findings indicate a wide variation in the average of items disclosed under this category. It can be conclude that corporate governance disclosure in the annual reports of Egyptian listed companies still premature. Even among companies that disclose such information, the results indicate that a number of these companies may focus on the form not the substance of corporate governance. Such companies may disclose to advertise themselves and to improve their image.

Once again, the findings suggest a wide space of improvements that can be achieved within this category of voluntary disclosure and also in the practice of corporate governance principles. In other words, interested parties in capital market may benefit from such findings to achieve both of de jure and de facto corporate governance and disclosure. This is can be done by the reviewing the code of corporate governance and by applying the concept of comply or explain and providing more details and guidelines of the best practice. Moreover, increasing companies and managers' awareness of the importance of corporate governance characteristics, such as audit committee, the role of non-executives, shareholders protection, may help them to be familiar with such practice and will lead to more transparency in the annual reports and other recent forms of communication.

Table 7.17 Frequencies of corporate governance items

No	Items	2003		2004		2005		2006		Pooled	
		Average	Sum	Average	sum	average	sum	Average	Sum	Average	sum
5.1	List of board members.	78.26	36	77.78	35	80.43	37	77.78	35	78.57	143
5.2	Picture of chairperson and/or other members.	36.96	17	33.33	15	32.61	15	35.56	16	34.62	63
5.3	Board member qualifications.	6.52	3	8.89	4	15.22	7	22.22	10	13.19	24
5.4	Number of shares held by board members.	2.17	1	2.22	1	2.17	1	4.44	2	2.75	5
5.5	Compensation policy for Top Management.	4.35	2	8.89	4	8.70	4	13.33	6	8.79	16
5.6	information on audit committee and its members	2.17	1	6.67	3	10.87	5	17.78	8	9.34	17
5.7	Corporate governance codes, policies and implementation extent	8.70	4	15.56	7	19.57	9	31.11	14	18.68	34
5.8	composition of board: executives and non executives	4.35	2	4.44	2	8.70	4	20	9	9.34	17
	Total Corporate governance disclosure %	**17.93**		**19.72**		**22.28**		**27.78**		**21.91**	

7.5.6 Shareholders information

Under the category of shareholders information, six voluntary information items are identified. As shown in table 7.12, the mean of such category of disclosure is about 23%. The average score of such information is ranging from 19.57% in 2003 to about 25% in 2006. The results indicate a low level of disclosure related to this type of information. The extent and the trend of this category of disclosure is presented in Figure 7.10. It can be seen from the figure that there is a gradual increasing in the extent of such disclosure.

Figure 7.10 Extent and trend of shareholders information

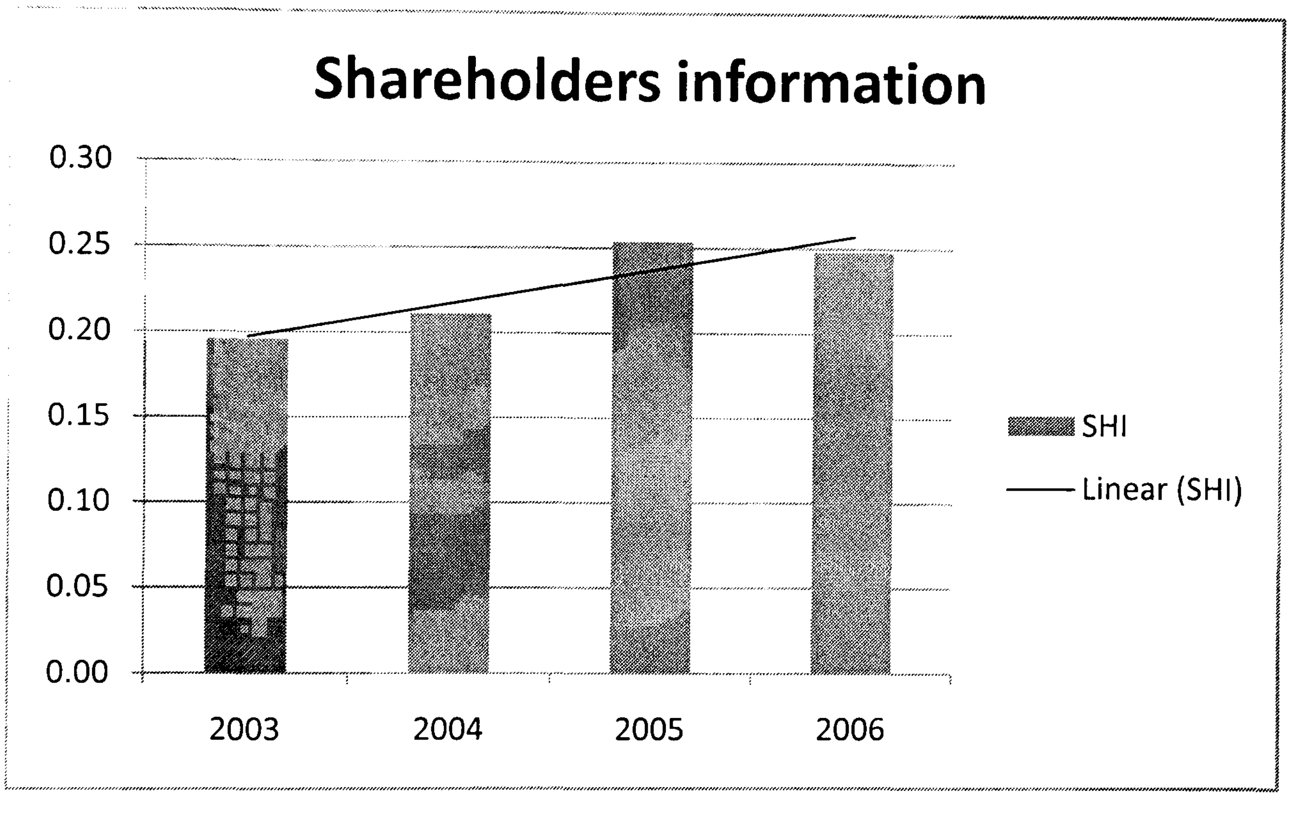


Table 7.18 presents the frequencies of information items disclosed under this category. The table indicates that the highest score is attributed to information on the majority shareholders and composition of shareholding. 55.49% of annual reports examined in the current study reveal such information item. Discussion of the risk and how companies manage it is awarded the second highest score, 35.16%. The findings reveal an increasing number of companies that include such information in their annual reports over the period of study. The mean of this item has increased from about 26% in 2003 to 40% in 2006.

This suggests that managers are willing to disclose more information about risk management. The reason for that may be to signal the effectiveness of managers in recognising and dealing with the business risk. In addition, keeping stakeholders update with such information may help in managing their expectation about corporate results and performance.

Moreover, 24.18% of the examined annual reports reveal information about the changes in dividends per share from the last years. The lowest score relates to information about share performance; about 5%. This is followed by information on share price; about 6%; and on the factors affecting dividends policy during the period; about 11%. This low level of disclosure related to share performance and dividends policy in annual reports may be attributed to the existence of other sources for this type of information. In general, shareholders have the right to access such information. Moreover, the performance of most active companies and their shares are subject to analysis by financial analysts and the capital market authority.

Table 7.18 Frequencies of items disclosed in shareholders information category

No	Items	2003		2004		2005		2006		Pooled	
		average	Sum	average	sum	average	sum	Average	Sum	Average	sum
6.1	Composition of shareholdings and Majority shareholders	56.52	26	53.33	24	56.52	26	55.56	25	55.49	101
6.2	Share performance, traded volume and value.	2.17	1	4.44	2	6.52	3	6.67	3	4.95	9
6.3	Share price information.	2.17	1	4.44	2	6.52	3	11.11	5	6.04	11
6.4	Factors affecting dividends policy.	8.70	4	6.67	3	15.22	7	13.33	6	10.99	20
6.5	Information on risk management	26.09	12	35.56	16	39.13	18	40.00	18	35.16	64
6.6	Dividends per share compared with previous years.	21.74	10	22.22	10	28.26	13	24.44	11	24.18	44
	Total Stockholders information %	**19.57**		**21.11**		**25.36**		**25.19**		**22.80**	

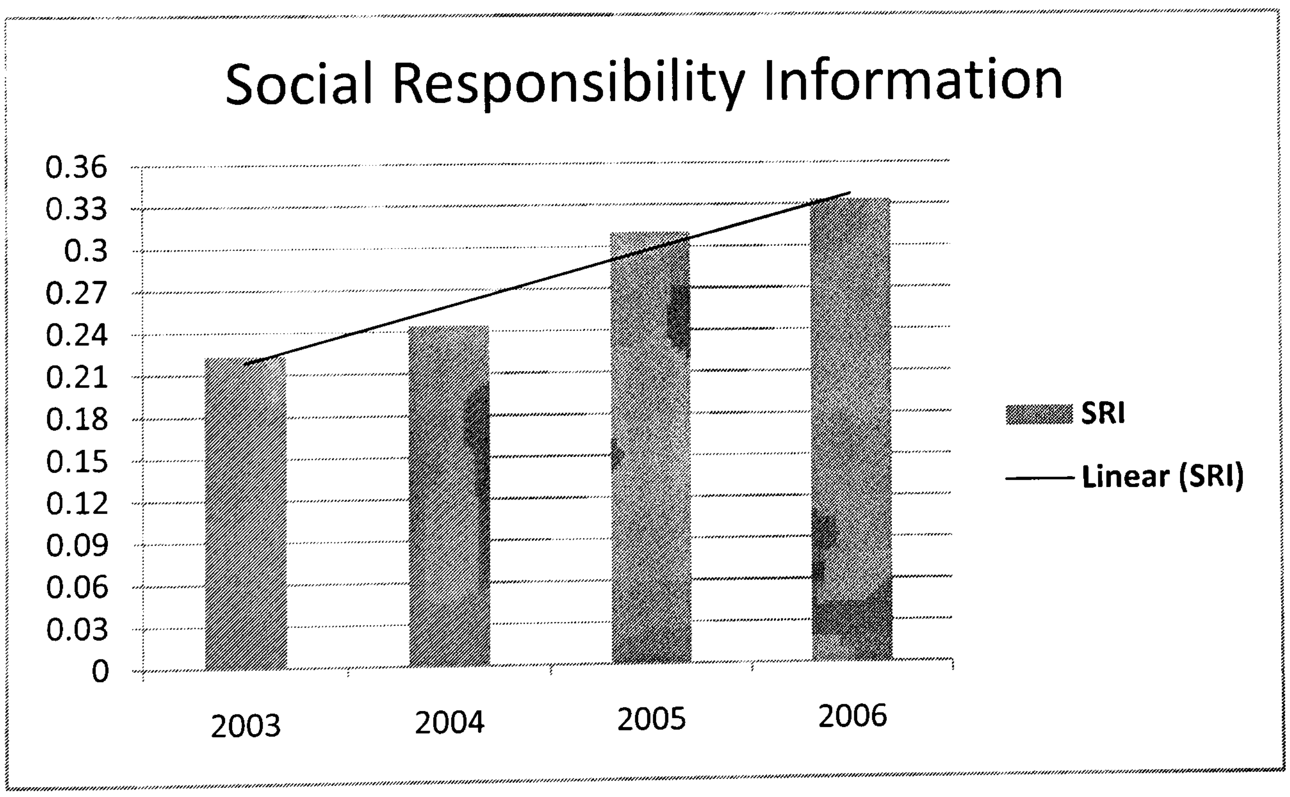
Table 7.19 Frequencies of items disclosed in social responsibility category

No	Items	2003		2004		2005		2006		Pooled	
		average	Sum	average	sum	average	sum	Average	Sum	Average	sum
7.1	Environmental information	39.13	18	40.00	18	45.65	21	44.44	20	42.31	77
7.2	Community involvement	19.57	9	22.22	10	36.96	17	44.44	20	30.77	56
7.3	Charitable donations and sponsorship	45.65	21	40.00	18	39.13	18	28.89	13	38.46	70
7.4	Health and safety information.	19.57	9	31.11	14	34.78	16	37.78	17	30.77	56
7.5	Significant events calendar	8.70	4	8.89	4	10.87	5	15.56	7	10.99	20
7.6	Information on customer service	10.87	5	11.11	5	23.91	11	31.11	14	19.23	35
7.7	Award/ ratings received and attempts to get or sustain it	13.04	6	17.78	8	26.09	12	31.11	14	21.98	40
	Total Social responsibility information %	**22.36**		**24.44**		**31.06**		**33.33**		**27.79**	

7.5.7 Social responsibility information

The last category in the checklist includes information items about corporate social responsibility. Reporting on corporate responsibility has been identified as one of the emerging issues in the area of corporate transparency. 'Including such information in annual reporting not only meets the information needs of a range of stakeholders but also offers the prepares a unique opportunity to showcase the conduct and contributions of the enterprise with regard to economic and social development' (UNCTAD, 2006, p.28). Seven information items are identified under this category. The mean of this type of disclosure is 27.79% over the four years. The findings indicate a considerable increase in the level of disclosure, from 22.36% in 2003 to 33.33% in 2006. This can be seen in figure 7.11 which shows the extent and trend of this category.

Figure 7.11 Extent and trend of corporate social responsibility information



In addition, table 7.19 presents the frequency of each item disclosed over the period of study. Environmental information has scored the highest average of disclosure under this category, 42%. The table indicates a considerable increase in the disclosure extent in last two years of the current study compared with the first two years. This is the case for all other information items included in this category which may reflect the increasing awareness of corporate social responsibility. The second highest average was awarded to charitable donations and sponsorship which scored about 38% over the four years. It can be seen from the table that these two items, environmental information and charitable donations and sponsorship, represent the highest score in the first two years 2003 and 2004. This may be an indicator that the investigated companies are more familiar with such items than other items. The same is applying to some extent to information about the award and ratings received.

Moreover, the table indicate that information about community involvement has scored average 30.77%. The mean of this information item is ranging from 19.57% in 2003 to 44% in 2006. This may be explained by the increasing role that most active companies play in Egyptian economic. As indicated in chapter two, Egyptian government allows and encourages the private sector to lead the Egyptian economy. Therefore, such most active companies may be willing to prove that they are aware about their social responsibility. The findings are in line with the argument of Rizk et al (2008) that Egyptian companies are willing to disclose environmental information in order to ensure their organizational legitimacy and to avoid additional regulations.

The disclosure average of health and safety information is 30.77%. It is ranging from 19.75% in 2003 to 37.78% in 2006. Customer service information has scored about 19% over the period of study. The results also indicate gradual increase in the disclosure of this item which may be attributed to the degree of competition. The lowest average is allocated to the significant events calendar, 10.99%. While four companies only disclose this calendar in their annual reports of years 2003 and 2004, seven companies include this information item in their annual reports in 2006.

In general, the findings indicate that investigated companies use annual reports to enhance their image as good corporate citizens. In addition to promote themselves and portray their companies, managers also may be willing to reduce the pressure that companies may face from different stakeholders to be more social.

To end with the current chapter table 7-20 presents the rank of voluntary disclosure items based on their average scores. As can be seen the top five items (disclosed by 70% or more of investigated companies) are financial ratios, list of board members, reasons and effects of acquisitions and disposal on corporate results, information on the principle products and projects, and the policy of human resources and employee training. On the other hand the lowest five items include number of shares held by members of the board, information on earnings or cash flow forecasts, share performance, share price, compensation policy for top management.

Table 7.20 Total Voluntary disclosure by item

No.	Information item	Average	No. Comp.	Rank
	General Information			
1.1	Statement of corporate Strategy.	26.92%	49	22
1.2	Information on the principal products, projects.	73.08%	133	4
1.3	Productive capacity.	45.60%	83	12
1.4	An overview of industry.	63.74%	116	7
1.5	Information on competitive environment.	41.21%	75	15
1.6	Organizational structure.	9.89%	18	38
1.7	Presenting annual reports in Arabic and English.	26.92%	49	23
	Financial Information			
2.1	Historical data and statistics for more than 2 years	48.35%	88	11
2.2	Any industry-specific ratios.	17.58%	32	31
2.3	Using charts, Graphs, or figures.	51.10%	93	9
2.4	Reasons and effects of acquisitions / disposals on corporate results.	78.02%	71	3
2.5	Financial Ratios disclosed (profitability and leverage ratios, liquidity and other ratios).	85.71%	156	1
2.6	Amount spent on training.	14.84%	27	33
	Non-financial information			
3.1	Market share.	24.73%	45	25
3.2	Number of employees trained	38.46%	70	16
3.3	Company policy on human resources and employee training.	70.33%	128	5
3.4	Research and Development activities.	25.27%	46	24
3.5	Productivity indicator.	49.45%	90	10
3.6	Marketing network and the principal markets.	69.23%	126	6
	Future Information			
4.1	Effects of acquisition / disposals on future results	41.75%	38	14
4.2	Future expansion and capital expenditure	13.74%	25	34
4.3	General discussion of future trends	19.23%	35	28
4.4	Information on earning or cash flow forecasts.	4.40%	8	45
4.5	Information on production plan and capacity forecast.	17.03%	31	32
4.6	Information on market share forecast	9.34%	17	39
	Corporate Governance Information			
5.1	List of board members.	78.57%	143	2
5.2	Picture of chairperson and/or other members.	34.62%	63	19
5.3	Board member qualifications.	13.19%	24	35
5.4	Number of shares held by members of the board.	2.75%	5	46
5.5	Compensation policy for Top Management.	8.79%	16	42
5.6	Information on audit committee and its members	9.34%	17	40

5.7	Corporate governance codes, policies, implementation extent	18.68%	34	30
5.8	composition of board of directors: executives and non executives	9.34%	17	41
	Shareholders Information			
6.1	Composition of shareholdings and Majority shareholders	55.49%	101	8
6.2	Share performance, traded volume and value.	4.95%	9	44
6.3	Share price information.	6.04%	11	43
6.4	Factors affecting dividends policy.	10.99%	20	36
6.5	Information on risk management	35.16%	64	18
6.6	Dividends per share compared with previous years.	24.18%	44	26
	Social responsibility Information			
7.1	Environmental information	42.31%	77	13
7.2	Community involvement	30.77%	56	20
7.3	Charitable donations and sponsorship	38.46%	70	17
7.4	Health and safety information.	30.77%	56	21
7.5	Significant events calendar	10.99%	20	37
7.6	Information on customer service	19.23%	35	29
7.7	Award/ ratings received and attempts to get or sustain it	21.98%	40	27

7.6 Summary and conclusion

To answer the first two research questions related to the extent and the trend of voluntary disclosure over the period of the study, the current chapter provides a closer analysis to the results of the checklist that has been constructed in the current study. It starts with assessing the goodness of the disclosure index. Several tests have been done to assess the reliability and validity of the index. The results of Cronbach's Alpha and the correlation analysis confirm that our measure of total voluntary disclosure is reliable and valid.

As expected in emerging capital markets, the findings indicate that the level of total voluntary disclosure in the annual reports of Egyptian listed companies is low. However, a gradual increase in the extent of total voluntary disclosure and its categories has been noticed over the period of study. Statistical tests indicate no significant differences between voluntary disclosure scores over the four years. The voluntary disclosure structure was consistent over the examined period. This suggests that Egyptian listed companies manage their disclosure policy. Additional analysis before and after issuing the Egyptian code of corporate governance in 2005 also indicates no significant differences between the extent of total voluntary disclosure before and after the Egyptian code. This suggests that the Egyptian code has no effect on the voluntary disclosure in corporate annual reports. Such conclusion may be explained based on the lack of familiarity in addition to the absence of the concept of "comply or explain" in the Egyptian code of corporate governance. However, caution must be taken into account when explaining such finding. We examined the voluntary disclosure for only one year; 2006; subsequent the Egyptian code of corporate governance. The effect of such code may need sometime to be reflected in the annual reports.

Having documented the reliability and validity of the research instrument and answered the first two research questions, the next chapter deals with the third research question related to the determinants of total voluntary disclosure in corporate annual report.

Chapter Eight: Statistical Results and Discussion

8.1 Introduction

The previous chapter deals with the first two research questions of the current study, the extent and the trend of voluntary disclosure practice. The current chapter aims to answer the research question related to the determinants of voluntary disclosure practice. Specifically it tests the research hypotheses related to corporate governance characteristics, ownership structure and corporate characteristics. The chapter starts with descriptive analysis of the variables included in the study in section 8.2. Section 8.3 presents the bivariate analysis while section 8.4 summarizes the regression diagnostics. The statistical results of multivariate analysis are presented in section 8.5. Section 8.6 presents discussion of the statistical results and tests the research hypotheses. Section 8.7 summarizes the regression results related to the categories of voluntary disclosure. The chapter ends with conclusion in section 8.8.

8.2 Descriptive statistics

Table 8-1 shows the descriptive statistics for the continuous independent variables in the current study. As indicated in the table, the mean board size is about 9 members with minimum 3 members and maximum 17 members. In addition it is notable that the average of the proportion of non executive directors is about 79%. It ranges from 40% to 93% which may reflect the vital role that non executive directors can play on the board and raise a question about its effectiveness. Regarding ownership structure, it is clear that there is a wide range of each of the three aspects, the average of block holders is about 15% and ranges from 0 to 85%, the mean government ownership is about 25% and ranges from 0 to 95% and institutional ownership has a mean 10% and ranges from 0 to 51%.

In addition the four continuous firm characteristics, namely firm size, profitability, liquidity and gearing, have wide ranges. Firm size ranges widely from 57.4 million Egyptian pound to 49506 million Egyptian pound. Also profitability ranges from -306% to 96.8% with average 18.52%. Liquidity has mean 1.59 and it ranges from 0.1 to 11.8 and gearing ranges from 0 to 7 with average 0.46. Therefore these variables are highly skewed, as can be seen from the table 8-1, which means that none of these variables is normally distributed and may need a form of transformation. The figures in table 8-1 indicate that observations have some extreme amounts (outliers) which need more attention during the analysis process and the interpretation of the results. However more explanation for this issue will be presented in the section of regression diagnostics (section 8.4.1).

Table 8-1 Descriptives for Regression Variables

Variable	Mean	Min.	Max.	S.D.	Skewness	Kurtosis
Board size	8.543956	3	17	2.880	0.237	2.396
Non executive directors	0.785184	0.4	0.933333	0.128	-1.504	4.862
Block holder ownership	14.68429	0	84.94	23.349	1.459	3.776
Governmental ownership	25.35467	0	94.93	28.922	0.856	2.503
Institutional ownership	10.19901	0	50.52	12.595	1.335	3.938
Firm size (million EP)	2852.491	57.355	49506.2	6390.108	4.667	27.755
Profitability (ROE)	18.52951	-306.83	96.8	32.801	-5.730	57.071
Liquidity	1.591225	0.101	11.882	1.243	4.096	30.087
Gearing	0.461742	0	7.101	0.881	4.266	27.098

8.3 Bivariate analysis

8.3.1 Continuous independent variables

To start our analysis, this section examines the association between the extent of total voluntary disclosure as the dependent variable and each of the continuous independent variables. As indicated before, Pearson correlation as a parametric test and Spearman's rank correlation as a non parametric test have been used in the current study. Table 8.2 presents the correlation coefficients based on the actual (untransformed) data.

The Pearson correlation coefficients (r) indicate that five explanatory variables are significantly associated with total voluntary disclosure in the annual reports of the investigated companies. Three of them represent firm characteristics; firm size, profitability, and gearing; one is related to corporate governance; Board size; and the other is governmental ownership. Regarding the corporate governance variables, the size of board of directors is found to be significantly associated (at 1% and 5% significance levels) with total voluntary disclosure. This suggests that the larger the size of the board, the more information to be disclosed voluntarily. On the other hand, the percentage of nonexecutive directors was found to have insignificant association with the extent of voluntary disclosure. The results indicate weak association between total voluntary disclosure and the percentage of non executive directors.

Regarding the three aspects of ownership structure, the percentage of block holder ownership and institutional ownership are found to be not associated with total voluntary disclosure. Similar to the percentage of nonexecutive directors, the correlation coefficients suggest a weak association between total voluntary disclosure and the percentage of institutional ownership. The results indicate that governmental ownership is associated negatively with total voluntary disclosure at 1% and 5% significance level. This suggests that the extent of voluntary disclosure in the annual reports increase with the decrease of governmental ownership.

Table 8-2: Correlation coefficients between total voluntary disclosure and continuous independent variables

Variable	Pearson	Spearman
Board size	**0.25****	0.23**
Non executive directors	0.04	0.05
Block holder ownership	0.14	0.17*
Governmental ownership	**-0.21****	-0.19*
Institutional ownership	-0.01	0.01
Firm size	**0.60****	0.58**
Profitability (ROE)	**0.30****	0.42**
Liquidity	-0.13	-0.17*
Gearing	**0.26****	0.47**

** Significant at 1%, * significance at 5%

Moreover, three variables represent firm characteristics; firm size, profitability, and gearing; were found to be positively associated (at 1% and 5% significance level) with the dependent variable; total voluntary disclosure. It can be noticed that liquidity is not observed to be significantly associated with total voluntary disclosure. According to the results, companies with big size, high profitability, and high gearing ratio are willing to disclose more information voluntarily in their annual reports.

As indicated in table 8-2; the Spearman's rank order correlation coefficients support the results from spearman test in respect of each of board size, firm size, profitability, and gearing. All these variables are found to be significantly associated with total voluntary disclosure at 1% and 5% significance level. Moreover, Spearman coefficients show consistent results with Pearson regarding the proportion of non executive directors and the percentage of institutional ownership. However, results regarding other variables are mixed. While the percentage of governmental ownership is found to be significant at 1% and 5% level under Pearson test, it is found to be significant at 5% significance level under Spearman test. Moreover, the proportion of block holder ownership and liquidity were observed to be significantly associated with total voluntary disclosure at 5% significance level.

8.3.2 Categorical (nominal) independent variables

To test the association between the dependent variable and the categorical independent variables in the current study, two statistical tests have been employed; t test as a parametric test and Mann Whitney test as non parametric test. Table 8-3 presents the results of both tests on total voluntary disclosure and the dummy independent variables. The results indicate significant differences (at the 1% level) in the mean of voluntary disclosure between groups in each of the categorical independent variables except role duality. Both parametric (t test) and non parametric (Mann Whitney) tests returned the same result.

Interestingly, companies with family members on the board were found to disclose more voluntary information than companies without family members on the board (at 1% significant level). The existence of family members on the board may be inauspiciously recognised by investors and other stakeholders who may feel that those members may focus on their own interests. Therefore, managers in such companies may be motivated to increase the extent of voluntary disclosure to mitigate the unfavourable effects. In addition, voluntary disclosure by companies with foreign members on the board is considerably more than companies without foreign members on the board. This suggests that foreign members have more experience with financial reporting and corporate governance issues, and are aware of the interests of stakeholders. However, further discussion for these variables will be provided in section 8.6.

Table 8-3 T test and Mann Whitney test for categorical independent variables

Variable	T test					Mann Whitney test	
	N	Mean	S.D.	t -value	Prob.	z- value	Prob.
Family members on the board				**-10.6356**	**0.000**	**-7.713**	**0.000**
Yes	45	0.4673	0.1399				
No	137	0.2608	0.1027				
Foreign members on the board				**-6.9031**	**0.000**	**-6.375**	**0.000**
Yes	37	0.4417	0.1258				
No	145	0.2787	0.1287				
Role duality				**1.3389**	**0.182**	**0.929**	**0.3531**
Yes	137	0.3037	0.1348				
No	45	0.3367	0.1673				
Cross listing				**-8.6444**	**0.000**	**-6.347**	**0.000**
Yes	21	0.5269	0.1106				
No	161	0.2838	0.1224				
Auditor type				**-7.8359**	**0.000**	**-6.448**	**0.000**
Big four	65	0.4089	0.1596				
Non big four	117	0.2579	0.0999				
Industry type				**3.4912**	**0.001**	**2.645**	**0.008**
Manufacturing	150	0.2952	0.1271				
non manufacturing	32	0.39	0.188				

As indicated in table 8-3, the results of t test confirm that there is no significant difference between the mean of total voluntary disclosure of companies with role duality and the one of companies without role duality. This suggests that role duality doesn't significantly affect the extent of total voluntary disclosure in the annual reports. The results of Mann Whitney test; non parametric; support the results of parametric t test; z value is .0.929 and the probability is 0.3531.

Regarding the firm characteristics, the results of both tests; parametric and non parametric, indicate that the extent of voluntary disclosure in the annual reports of companies with cross listing, audited by big audit firm, and non manufacturing companies is significantly more than companies listed only in local capital market, audited by non big audit firm and manufacturing companies. This indicates that companies with foreign listing are familiar with the disclosure pattern and practice in western capital market. In addition, the results support the idea of influence of the big audit firm on their clients to increase their disclosure and transparency (Wallace et al.; 1994).

As such, bivariate analysis provides evidence of the relationship between the dependent variable; total voluntary disclosure; and each of the independents variables. As indicated in chapter two, a number of prior disclosure studies employed only such type of analysis (e.g. Firth, 1979 and 1980; McNally et al.; 1982). However, it may be better to consider the relationship between the dependent variable and all independent variables at the same time. The majority of disclosure studies use both bivariate and multivariate analysis. Some of these studies report that significant explanatory variables vary under both analyses (for example, Hossain et al.; 1994, and Raffournier, 1995). The following section employs multivariate analysis, multiple regression, to explain the variation in the extent of total voluntary disclosure in the annual reports of the most active non financial Egyptian listed companies.

8.4 Multivariate analysis

Multivariate analysis, as an expression, is used to describe analysis of data that are multivariate. Multivariate data consist of observations on several different variables for a number of individuals or objects studied. It is commonly agreed that results of multivariate analysis could not be attained without multivariate analysis (Chatfield and Collins, 1980 and Afifi et al.; 2004). Among multivariate analyses is regression analysis which is one of the most common and widely used techniques in statistical analysis especially in disclosure literature (Cooke, 1998). It is mainly used in situations where there is one or a group of dependent variable/s that is thought to be a result of one or more independent variables, the changes in the values of independents explain most of the changes in dependents' values.

The relationship between dependents and independents can take many forms, but generally it is either 'linear' or 'non-linear'. When we have one dependent variable and two or more independent variables, the regression model is said to be 'multiple'. As indicated before, the current study examines the relationship between total voluntary disclosure as dependent variable and a number of independent variables; board characteristics, ownership structure and firm characteristics. Therefore, multiple regression model is considered to be relevant to the current study. The basic and typical choice for the relationship form between dependent and independents, as a starting point, is linear, so the model is called "multiple linear regression model". The Ordinary Least Squares (OLS) regression is considered to be a powerful technique especially when the model contains continuous and dummy variables (Hutcheson and Sofroniou, 1999). However, there are some assumptions must be satisfied before using the multiple linear regression analysis, OLS. The following sections present the multiple regression model suggested in the current study, followed by the regression diagnostics that represent the first step to choose the relevant statistical method to analyze the collected data in the current study.

Multiple Regression Model:

The multiple linear regression model can be represented, in its general form, as follows:

$$Y_i = \beta_o + \beta_1 f_1(X_{i1}) + \beta_2 f_2(X_{i2}) + \ldots + \beta_k f_k(X_{ik}) + \varepsilon_i$$

where:

Y : dependent variable

$X_1, \ldots, X_k$: independent (explanatory) variables

$\beta_o, \ldots, \beta_k$: regression model coefficients (parameters).

$f_1, \ldots, f_k$: functions (transformations) of independent variables, such that the relationship between Y and each $f(X)$ is assumed to be linear.

ε : random error

As illustrated in chapter five, the dependent variable is the total voluntary disclosure in the annual reports of the most active Egyptian listed companies TVDS. The independent variables contain proxies of three groups that expected to have ; based on the theoretical framework and evidence from prior studies; a relationship with the dependent variable. These independent variables contain continuous variables and categorical variables. The continuous variables include board size, percentage of non executive directors, proportion of block holder ownership, governmental ownership, institutional ownership, firm size, profitability, gearing, and liquidity. On the other hand, the categorical variables include family members on the board, role duality, foreign members on the board, cross listing, industry type and auditor type.

8.4.1 Regression diagnostic

Cooke (1998) highlights the importance of detailed data screening in disclosure studies to assess the impact of distribution problems, non linearity, in addition to the problems of outliers before deciding the appropriate statistical method. In general, there are several methods to estimate regression coefficients (parameters). The linear regression is usually used; OLS method. To justify using OLS, there are four principal assumptions.

1. Linearity: The relationship between the dependent variable and each independent variable should be linear.
2. Independence and normality of Error: The error terms (ε_i) are independent (successive residuals are not correlated, no serial correlation) and identically distributed and follow the normal distribution with constant mean zero and constant variance σ^2.
3. Homoscedasticity: the variance of the error terms is constant for each observation (set of *Xi* values).
4. There is no linear relationship between two or more independent variables (no multicollinearity).

If any of these assumptions is violated (i.e., if there is nonlinearity, non-normality of errors, heteroscedasticity and/or multiple correlation), then the results of regression model may be inefficient or seriously biased or misleading. After running a multiple linear regression analysis and estimating the values of the dependent variable (TVDS) and therefore residuals (errors), one can check if the OLS linear regression is a good choice or not by performing some model diagnostics that are basically based on checking the OLS linear regression assumptions.

8.4.1.1 Checking Linearity

The relationship between the dependent and independent variables should be linear. To check this, one can look at the plot(s) of the residuals versus the independent variable values, and if linearity exists, there will be no obvious clustering of positive residuals or a clustering of negative residuals. Linearity can also easily be checked through plotting each independent variable against the dependent variable and see how well does the fitted regression line represent their relationship. The graphs for checking linearity of each independent indicate that some of the independent variables in the model does not have an obvious linear relationship with the dependent variable, especially firm characteristics namely: profitability, liquidity, gearing and firm size.

This is either because of the presence of outliers or unusual observations, or because that the linear model is not a good fit to describe the relation between the dependent variable and each independent variable. As a result, it can be concluded that the linearity assumption is not satisfied, and therefore the OLS estimators related to the nonlinear relationship variables will not be unbiased. However, this result of non linearity is common in the majority of prior disclosure studies (Cooke, 1998).

8.4.1.2 Checking Normality of Residuals

Normality implies that errors (residuals) should be normally distributed. Technically, normality is necessary only for hypothesis tests to be valid. Normality of residuals can be checked by two methods; graphical methods and numerical methods. Both of them; normality plots and normality tests; have been employed in the current study.

Graphical methods

These are the most common plots to check the assumption of normality:

- Q-Q plot: plots the quantiles of a variable against the quantiles of Normal distribution.

- P-P plot: standardized normal probability plot.

- Histogram.

- Density estimate: plots the density of a variable and the normal density.

Using STATA, the normality plots were as follows:

Figure 8-1 Q-Q Plot

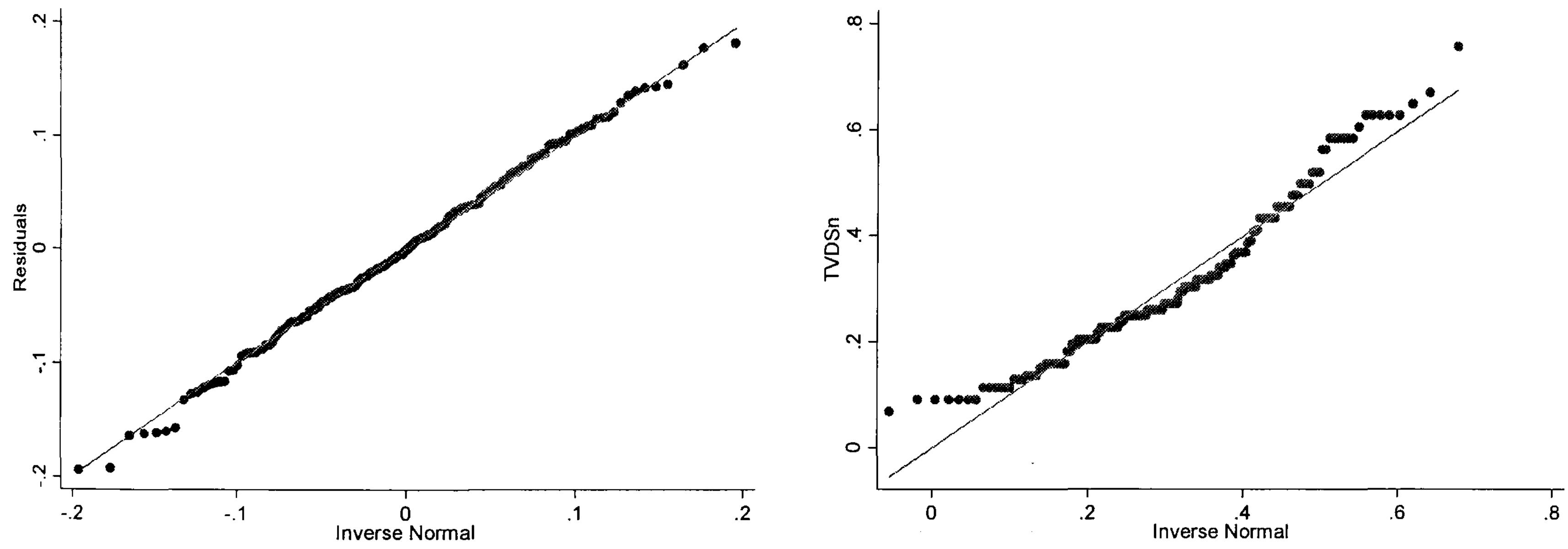


Figure 8-2 P-P Plot

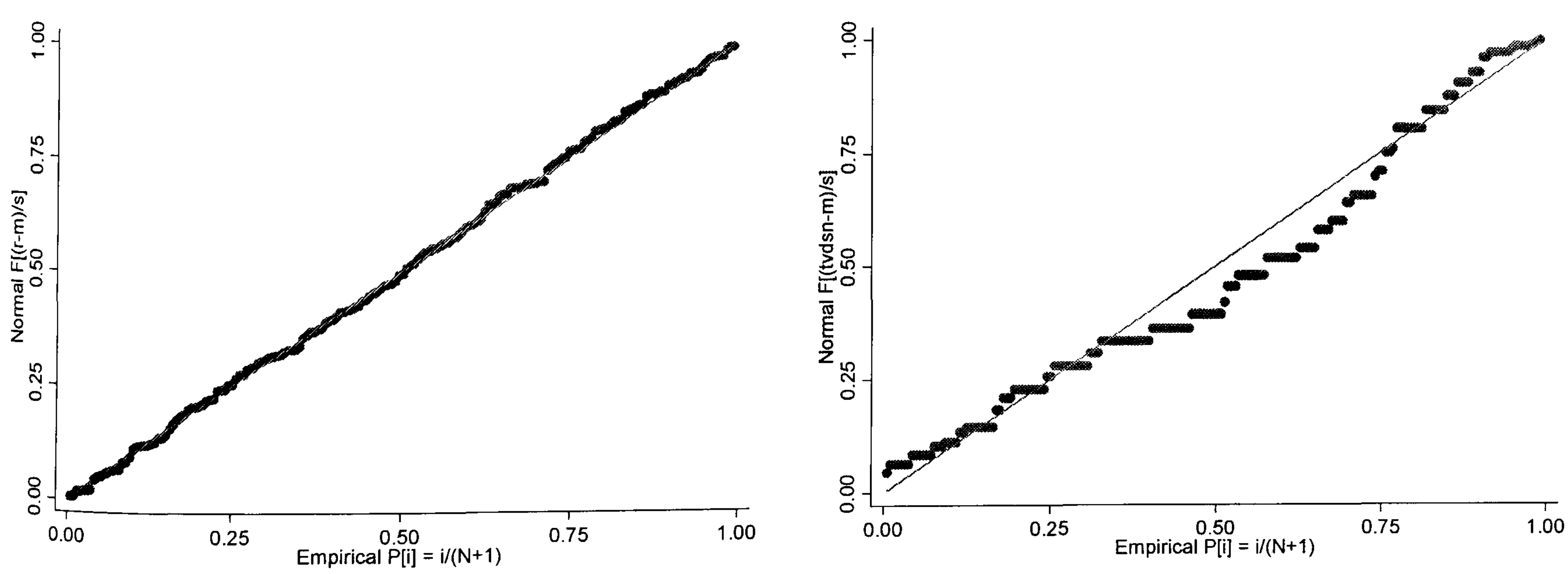
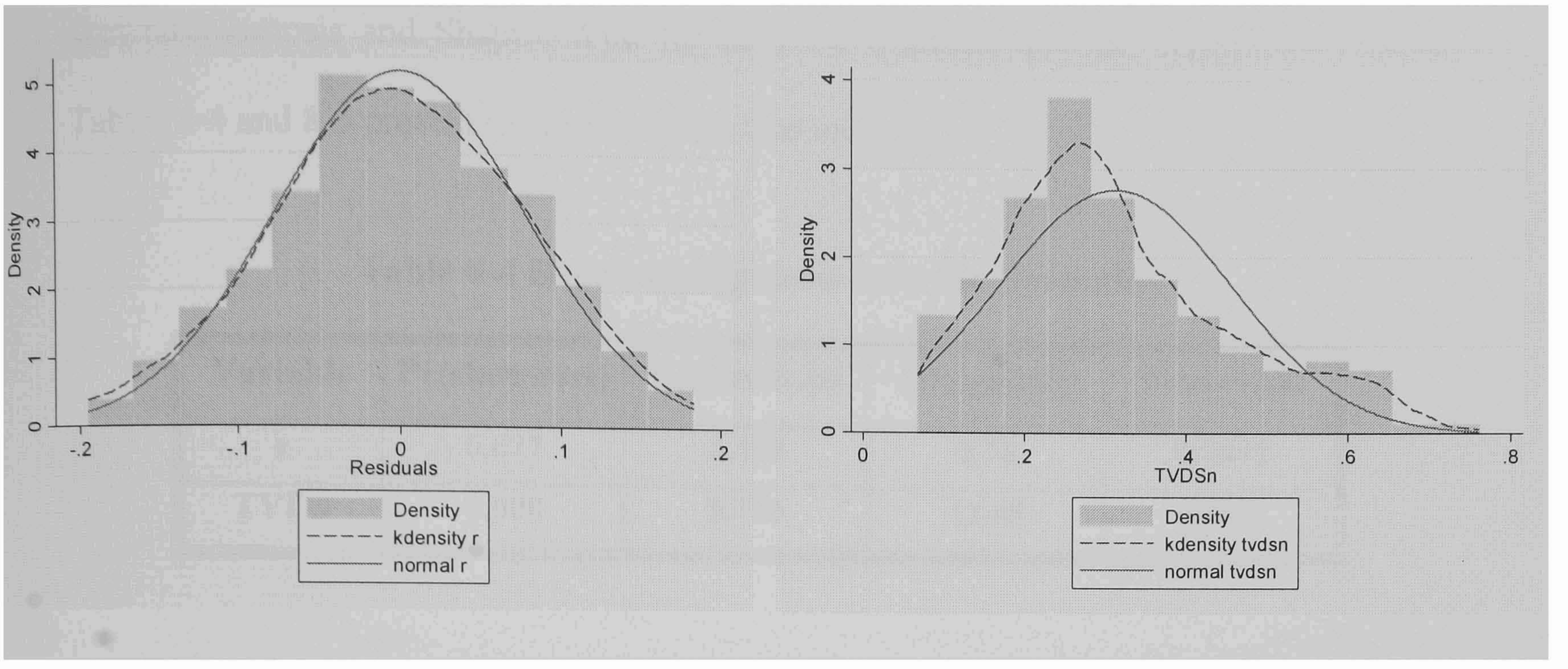


Figure 8-3 Histogram, normal curve and Kernel density estimate



Numerical methods of Normality test:

There are many numerical methods can be used to test the assumption of normality. Examples of these methods include Kolmogorov – Smirnov D statistic, skewness, and Shapiro – Wilk W statistic. However, Kolmogorov – Smirnov D has been found to have poor power properties. It is argued that it tends to suggest rejecting the null hypothesis when the sample size is large and accept it when the sample size is small. On the other hand, Shapiro – Wilk W statistic has been shown to have a good power against a wide range of non normal distribution. If the value of p is small, then the data may not be considered normally distributed. Skewnessis is a measure of how non symmetric a distribution is. If the data are symmetrically or normally distributed, the computed skewness will be close to zero (Afifi et al.; 2004).

Therefore, the current study use STATA to employs two common tests for normality: skewness-kurtosis and Shapiro-Wilk for both the residuals and the dependent variable. Tables 8-4 and 8-5 present the results of the two methods[1].

Table 8-4 Skewness/Kurtosis tests for Normality

Variable	Pr(skewness)	Pr(kurtosis)	adj chi2(2)	Prob>chi2
r	0.627	0.468	0.74	0.6892
TVDS	0.000	0.703	12.45	0.002

Table 8-5 Shapiro-Wilk *W* test for normal data

Variable	obs	w	v	z	Prob>z
r	182	0.99556	0.611	-1.129	0.87055
TVDS	182	0.95044	6.813	4.394	0.00001

The two methods of normality test, graphical and numerical method, suggest the same result. It is clear from the previous results that errors are normally distributed which is considered to be necessary for doing hypotheses testing about regression parameters. On the other hand, it can be noticed that the dependent variable is not normally distributed, and this is mainly related to the skewness of the distribution. One of the features of disclosure studies is that the extent of disclosure, the dependent variable, is non negative variable. The average of total voluntary disclosure score ranges from zero for non disclosure to 100% for full disclosure. Statistically, this may lead to biased prediction problem that may need to transform the dependent variable, using log odd for example (Ahmed and Nichols, 1994).

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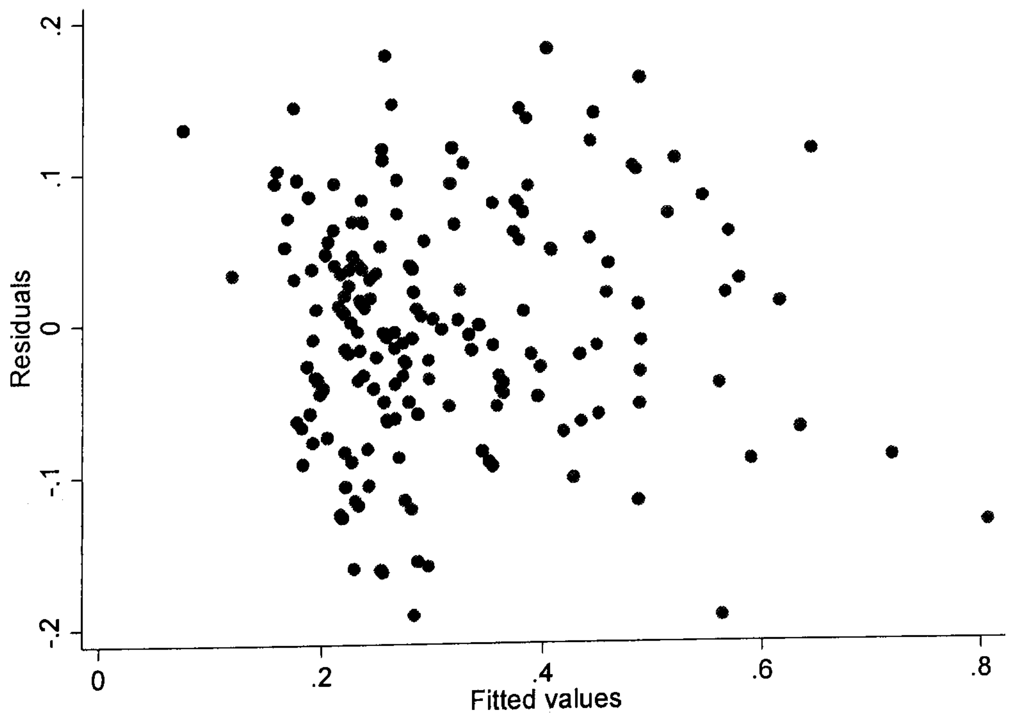
1 Both methods have been employed after omitting the outliers and the results were the same; errors are normally distributed and the dependent variable was not normally distributed.

However, the main purpose of the majority of disclosure studies is to explain the variability of the extent of disclosure among investigated companies not to predict the disclosure level (Cooke, 1998). Therefore, normality of dependent variable is not our main concern in this regard.

8.4.1.3 Checking Homoscedasticity of Residuals

The homoscedasticity assumption means that variance of the error terms is constant for each observation. Graphical and numerical methods can be applied to check this assumption. Graphically, one can look at plots of residuals versus predicted values (in some situations, residuals can also be plotted versus some independent variables for further analysis), and notice if residuals are getting larger (more spread-out) as a function of predicted values. STATA provides two numerical methods for hetroscedasticity; Cameron & Trivedi's decomposition of IM test and Breusch-Pagan / Cook-Weisberg and White's tests. The current study employs the graphical and numerical methods. Figure 8-4 shows the graph representing residuals versus predicted values. Tables 8-6 and 8-7 present the results of numerical tests.

Figure 8-4 The relationship between residuals and predicted values



Numerical tests of heteroscedasticity:

Table 8-6 Breusch-Pagan / Cook-Weisberg and White's tests for Heteroscedasticity

Test	Chi-square	Prob>chi2
Breusch-Pagan / Cook-Weisberg	**2.19**	**0.1388**
White's	**167.20**	**0.0133**

Table 8-7 Cameron & Trivedi's decomposition of IM test for Heteroscedasticity

Source	Chi-square	df	Prob>chi2
Heteroskedasticity	**167.20**	**129**	**0.0133**
Skewness	**30.55**	**15**	**0.0101**
Kurtosis	**1.69**	**1**	**0.1941**
Total	**199.44**	**145**	**0.0018**

The test results point out that errors have non-constant variance (heteroscedastic), which indicate that the OLS estimators will not have the minimum variance of all unbiased estimators, and also the P-values will be unreliable. In other words the current data suffer from heteroscedasticity.

8.4.1.4 Checking for Multicollinearity

Multicollinearity implies that there is a linear relationship between two or more independent variables. When multicollinearity exists, it will be difficult to differentiate the individual effects of explanatory variables and OLS estimators may be biased; tend to have large variances (Murray, 2006). Furthermore, if there is a perfect linear relationship among the independents, the estimates for a regression model cannot be uniquely computed. The two common ways to check for the presence of multicollinearity between independent variables are correlation coefficients and variance inflation factors (VIF) with tolerance values. These two ways have been used widely in disclosure literature. The current study employs both of them to check whether the explanatory variables or the model suffer from multicollinearity. Table (8-8) shows the variance inflation factor (VIF) and tolerance coefficients of each explanatory variable. Correlation coefficients (Pearson and Sperman) for independent variables in the regression model are shown in Tables (8-9) and (8-10).

Table 8-8 VIF test results

Variable	VIF	Tolerance (1/VIF)
Family members on the board	**2.270**	**0.440**
Firm size	**2.150**	**0.466**
Cross listing	**2.070**	**0.483**
Board size	**2.040**	**0.490**
Governmental ownership	**1.910**	**0.523**
Institutional ownership	**1.730**	**0.577**
Auditor type	**1.700**	**0.587**
Industry type	**1.600**	**0.625**
Foreign members on the board	**1.500**	**0.667**
Block holder ownership	**1.500**	**0.668**
Percentage of non executive members	**1.470**	**0.679**
Gearing	**1.380**	**0.724**
Role duality	**1.240**	**0.808**
Profitability	**1.200**	**0.833**
Liquidity	**1.150**	**0.873**
Mean VIF	**1.66**	

Regarding The Variance Inflation Factor (VIF), Gujarati (2003) indicates there is no problem if the VIF is less than 10. However, others suggest that that the value of 5 can be used as a rule of thumb (Groebner et al.; 2005). However, it can be seen from the table that the maximum VIF is 2.27 and the mean VIF is 1.66. Moreover, the lowest tolerance coefficient is 0.44. Therefore, the results of VIF and tolerance coefficients; based upon the rule of thumb; indicate that there is no an unacceptable level of multicollinearity in the current study.

It is commonly agreed that the correlation matrix is a powerful tool for indicating the relation between predictors. There has been no agreement among researchers regarding the cut off correlation percentage (Alsaeed, 2006). While some researchers use 0.8; e.g. Gujarati (2003); others suggest using 0.7; e.g. Tabachnick and Fidell (1996). Tables 8-9 and 8-10 present the correlation coefficients of parametric and nonparametric tests; Pearson and Spearman Coefficients. It can be noticed from both tables that correlation coefficients confirm the results of VIF. According to Pearson correlations (table 8-9), the correlation coefficients of all continuous independent variables are less than 0.50. The same can be concluded from Spearman's rank correlation which indicates that the highest coefficient is 0.55. Based on these results, it can be concluded that there is no potential multicollinearity problem in the current study.

8.4.1.5 Unusual and Influential Data

In any data set, there may be some observations that are inconsistent with other observations; i.e. outliers; and can change the results of regression analysis. It is important to have a quick check for such potential unusual observations in the data set and see how they are different. Sometimes, this helps to identify possible errors in data entry.

An unusual observation can be either an *outlier* (observation with large residual) or an *influential* data point (when removed, the estimated coefficients change significantly) or observation with relatively high *leverage* (leverage is a measure of how far an independent variable deviates from its mean).

Table 8-9 Pearson Correlation

	Bsize	Nexc	Block	Gov	Inst	Fsize	ROE	Gear	Liq
Bsize	1								
Nexc	**0.488****	1							
Block	0.022	0.117	1						
Gov	-0.306**	-0.305**	-0.39**	1					
Inst	**0.475****	0.306**	-0.102	0.004	1				
Fsize	0.153*	0.071	-0.057	-0.149*	-0.113	1			
ROE	0.191**	0.025	-0.027	-0.033	0.131	0.177*	1		
Gear	-0.182*	0.048	0.125	0.046	0.008	0.161*	-0.113	1	
Liq	0.083	0.036	-0.057	0.114	0.069	-0.146	-0.032	-0.234**	1

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

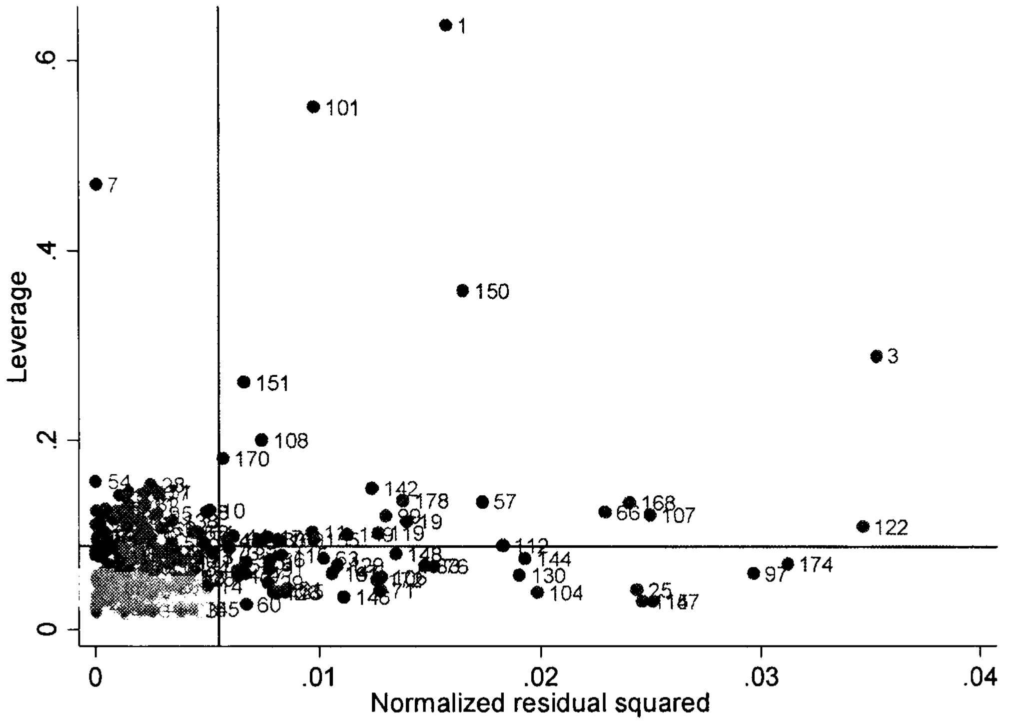
Table 8-10 Spearman Correlation

	Bsize	Nexc	Block	Gov	Inst	Fsize	ROE	Gear	Liq
Bsize	1								
Nexc	**0.554****	1							
Block	0.096	0.088	1						
Gov	-0.218**	-0.152*	-0.361**	1					
Inst	0.434**	0.313**	0.012	0.192**	1				
Fsize	0.298**	0.160*	0.027	-0.110	-0.025	1			
ROE	0.145	0.012	-0.156*	0.011	0.145	0.305**	1		
Gear	0.058	0.117	0.117	-0.153*	0.044	0.360**	0.087	1	
Liq	0.026	-0.043	-0.086	0.115	0.107	-0.136	-0.131	-0.433**	1

** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

In STATA, one can examine his data set for unusual data points in several ways. One simple and quick way is through a plot that shows the leverage by the residual squared to see if any observations are jointly high on both of these measures. This can be done using the lvr2plot command. The following figure 8-5 shows this scatter plot.

Figure 8-5 Leverage vs. residuals scatter plot



The horizontal reference line is the mean for leverage, and the vertical is the mean for the normalized residual squared. As shown in the figure, it is clear that certain points are obviously extreme. However, it is usual to have some observations that seem to be quite high or low. So the question is: should these observations be removed or not? Afifi et al (2004) indicate that statisticians differ in their opinions. Some of them prefer to remove these outliers and others see that it is unethical to remove outliers for fear of biasing the results. However, running the analysis twice, with and without outliers, enables the researcher to see the effect of these observations on the results. To explore the effect of extreme observations on the results and to avoid any possible unethical issues, it was decided to follow the last approach of running the analyses twice. The following sections present the regression results based on all observations and also highlight the difference in results after omitting the outliers.

8.4.1.6 Regression Diagnostic summary

Based on the results of the above graphical and numerical methods, it can be noticed that there are some violations of OLS assumptions. The results suggest non-linearity for some independent variables in addition to the problem of heteroscedasticity. Furthermore, the tests indicate the normality of residuals, although the dependent variable was found to be not normally distributed. In addition, the results of VIF and correlations coefficients confirm that there is no multicollinearity.

The question now is how to deal with the violations of classical regression assumptions? To answer this question, Draper (1988); as cited in Cooke (1998); identified four approaches as follow:

1. To do nothing approach
2. The data analytic approach: investigate influential observations and transformations.
3. The model expansion approach: departure from assumptions once found
4. The robust approach: use non classical techniques such as M – estimators.

The first approach is considered to be impractical because it ignores the problem and the results will be unreliable. Therefore it was decided to reject this approach. The second approach; data analytic approach; is widely used within the context of linear regression. The common way to deal with such assumption violations is to transform the data. Transformation is considered to be helpful in regression analysis especially in the case of non linearity, non normality and / or heteroscedasticity problems (Cooke, 1998). In the context of disclosure literature, Cooke (1998) argues that

> "*Scholars undertaking research on disclosure issues should pay attention to the structure of the data and, when necessary, consider the appropriateness of transformations" (p 209)*

However, there are many forms of transformation. Common transformations include logarithmic, inverse, exponential, square and, square root. When using transformations, one should choose between transformations that are valid for each specific variable. By valid, we mean that transformation keeps the basic structural differences between values (for example negative and positive values). STATA has an option called ladder of powers that automatically produces power transformations for various values of P Also STATA through the command "lnskew0" considers all transformations of the form ln (X $-k$) and finds the value of k which makes the skewness approximately equal to zero. If skewness is around zero 0.000 (– or +) that means the transformed variable fits a normal distribution much better than the original data (Afifi et al.; 2004).

On the other hand, it is not easy to evaluate the usefulness of transformation especially in the case of small sample size or outliers. Therefore it may be helpful to perform the analysis with and without the transformation. By examining the results of both analyses one will be sure that the conclusion is not altered after transformation (Afifi et al.; 2004).

The third approach, the model expansion approach, requires examining data as in the second approach and when departures are found they are modelled directly on the raw data scale through a broadening of the parametric model. A leading example of this approach can is Generalized Linear Models (Draper, 1988). In addition, one can choose another test; non classical technique; which doesn't necessarily require fulfilling these assumptions; i.e. the fourth approach according to Draper (1988).

Based on the above discussion, it has been decided; for the purposes of the current study; to follow the approaches of Draper (1988), except the first one. The study has employed transformation to deal with the problems of nonlinearity and heteroscedasticity. In addition, it was decided to use tests other than OLS regression, namely GLS, Tobit and Quantile regression. Using several forms of transformation and regression tests provides opportunity to clarify the answer of research questions by identifying variables that have most significant relationship with the dependent variable; total voluntary disclosure. Moreover; using several approaches is recommended to ensure that the results are not method driven but are robust across methods (Cooke, 1998). As such, the three approaches add more robustness to the results and conclusion of the present study. The following section presents the results of regression analyses and the rational for choosing each of regression tests.

8.5 Regression Analyses

8.5.1 OLS regression analysis

OLS with Transformed data and normal scores

The majority of disclosure literature has employed several forms of transformation to overcome the problems of not satisfying with the linear regression assumptions. Examples of prior disclosure studies that employ rank transformation include Lang and Lundholm (1993); Wallace et al. (1994); Wallace & Naser (1995); Owusu-Ansah (1998), and Abd-Elsalam and Weetman (2003). On the other hand, normal score transformation has been used by a number of prior studies such as Haniffa and Cooke (2002), Ghazali and Weetman (2006).

The issue of transformation in disclosure studies has been examined by Cooke (1998) who reviews using rank regression and suggests replacing the data with their normal scores. Under rank regression, the observations are transformed based on its ranking from the smallest one to the largest one (Iman and Conover, 1979). Rank transformation is relatively insensitive to outliers and is considered to be distributed free, and for that reason ranks can be used to develop tests of heteroscedastisty and serial correlation {Cheng et al, (1992) and Cooke (1998)}. However, rank transformation suffers from some weaknesses. Under such type of transformation which is distribution free, caution must be taken in testing for and interpreting the significance of F and t test. In addition, the error structure cannot be normal and the mapping of individual observations to ranks is a somewhat arbitrary transformation (Cooke, 1998).

Cooke (1998) proposes using normal scores instead of ranks as an extension of rank method. Normal scores are based on Van Der Waerden approach; transforming actual observations to the normal distribution by dividing the distribution into the number of observations plus one region on the basis that each region has equal probability. Cooke indicates that the main advantage of replacing the ranks by normal scores is that the resulting tests would have exact statistical properties because (a) significance levels can be determined, (b) the F and t-tests are meaningful and (c) the power of the F and t-tesls may be used. Moreover, the regression coefficients derived using normal scores are meaningful. In addition, it offers a means whereby a non-normal dependent variable may be transformed into a normal one; a further advantage over ranks.

Based on the above discussion, transformation has been decided to be employed in the current study to deal with the problem of assumptions' violation. Several regression models were run based on different transformations. We transformed the independent variables that seem to have a nonlinear relation with the dependent variable, and to deal with the heteroscedastisty, we transform the dependent variable which is not normally distributed[2]. In addition, it is recommended to transform the dependent and independent variables to their normal scores, not only the dependent one, to keep the relationship between the dependent variable and all independent variables (Cooke, 1998). Therefore, we used normal scores to transform the dependent and all continuous independent variables. Table 8-11 presents summary of the results of regression analyses.

As indicated in table 8-11 there is a little difference in the adjusted R square and the significant variables under the different transformations. The adjusted R square in the first model was about %64 which is slightly higher than the adjusted R square in the second model, full normal scores %63. This implies that over %60 of the variation in total voluntary disclosure in the annual reports of investigated companies can be explained by the proposed model in the current study. The R-squared is comparable to Depoers (2000) 65% and higher than Haniffa and Cooke (2002) 47.9% and Barako, et al (2006) 53.4%; but it is lower than Hassan et al (2006) 86.3%. The coefficients of the independent variables show the direction and the magnitude of the relationship with the dependent variable. In case of corporate governance characteristics results of the first model indicate that two variables are positively associated (at level 1%) with total voluntary disclosure in the annual reports; the existence of family members on the board and the existence of foreign members on the board. The percentage of non executive directors was found to be negatively associated with total voluntary disclosure at level 5%. However, the results of the first model indicate that both of role duality and board size were not associated with total voluntary disclosure.

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[2] Transforming the independent variables is more preferable than transforming the dependent variable (Cooke, 1998). The reason is the disturbing of the relationship between the dependent variable and the independent variables and the change in the error distribution. However, given the problems of heteroscedastisty and non normal dependent variable we transform the dependent variable in our multivariate analysis.

Table 8 -11 Results of regression analyses

Variable	OLS		Normal scoring	
	Coefficient	P > t	Coefficient	P > t
Corporate Governance				
Family members on the board	0.724054	0.000	0.69316	0.000
Role duality	0.118414	0.295	0.116656	0.310
Board size	0.036612	0.105	0.067613	0.319
Non executive directors	-0.86487	0.040	-0.09022	0.119
Foreign members on the board	0.49188	0.000	0.468973	0.001
Ownership Structure				
Block holder ownership	-0.00114	0.619	-0.02356	0.724
Governmental ownership	0.004085	0.052	0.110137	0.092
Institutional ownership	0.006028	0.214	0.082857	0.186
Firm Characteristics				
Cross listing	0.469581	0.009	0.527075	0.003
Auditor type	0.385814	0.001	0.346267	0.004
Industry membership	0.216089	0.130	0.144515	0.318
Firm size	0.108301	0.030	0.154081	0.013
Profitability	0.171834	0.001	0.186912	0.001
Gearing	0.44187	0.000	0.226133	0.000
Liquidity	0.109033	0.157	0.076476	0.157
Constant	-1.50629	0.002	-0.66445	0.000
Prob. > F	0.000		0.000	
R- squared	0.6694		0.6589	
Adjusted R- squared	0.6396		0.628	

Using normal scores for all variables, model two, the results support the significance association of the existence of family members and foreign members on the board (at level 1%) with total voluntary disclosure. also it was found that both of role duality and board size were not associated with total voluntary disclosure. However, contrary to the first model, the percentage of non executive directors was found to be insignificant variable.

Regarding ownership structure, none of the three aspects of ownership structure was found to be significant at the levels 1% or 5% in the first model. The percentage of block holder ownership has a negative association but insignificant also institutional ownership was insignificant but with positive association. However, governmental ownership was found to be significant only at the 10% level. The second model provided the same results, the percentages of block holders and institutional ownership were found to be insignificant. In addition, governmental ownership was found to be marginally significant at the 10% level.

In respect of corporate characteristics, five variables were found to have significant association with total voluntary disclosure in the first and the second models. These variables are cross listing, auditor type, profitability, gearing at the 1% level and firm size at the 5% level. Industry membership and liquidity were found to be insignificant variables in both models.

8.5.2 GLS regression analysis

The regression diagnostic indicates heteroscedastisty in the current study. There are several reasons for this case of unequal variance, e.g. outliers and skewness. In such case of heteroscedasticity, it is preferred to give less weight for observations coming from populations with greater variability than the weight given for observations from populations with smaller variability. However, OLS does not make use of the information contained in the unequal variability of the dependent variable since it assigns equal weight to each observation. Generalized least squares GLS is OLS on the transformed variables that satisfy the standard least-squares assumptions. As such, GLS minimizes a weighted sum of residual squares not minimizing an un-weighted or equally weighted as OLS. (See Gujarati, 2003, pp.388-398)

To benefit from the advantages of panel data analysis in the current study we employed pooled generalized least squares GLS (unbalanced). The results are shown in table 8- 12.

Table 8 - 12 Results of GLS regression

Number of obs	182	**Wald chi2(15)**	523.21
Number of groups	4	**Prob. > chi2**	0.000

TVDS	**Coef.**	**z**	**P>z**
Family members on the board	0.1047	5.230	**0.000**
Role duality	0.0180	1.300	0.195
Board size	0.0073	2.650	**0.008**
Non executive directors	-0.1257	-2.490	**0.013**
Foreign members on the board	0.0604	3.670	**0.000**
Block holder ownership	-0.0003	-1.050	0.295
Governmental ownership	0.0004	1.710	**0.088**
Institutional ownership	0.0004	0.700	0.483
Cross listing	0.0889	4.120	**0.000**
Auditor type	0.0460	3.180	**0.001**
Industry membership	0.0183	1.050	0.293
Firm size	0.0238	3.990	**0.000**
Profitability	0.0229	3.550	**0.000**
Gearing	0.0507	3.530	**0.000**
Liquidity	0.0092	0.950	0.342
_cons	0.0517	0.910	0.363

According to the results of GLS in table 8-12, four variables of corporate governance characteristics were found to have significant association, at the 1% and 5% level, with total voluntary disclosure. The existence of family member on the board, board size, and the presence of foreign members on the board were positively significantly associated with total voluntary disclosure at the 1% level. While the proportion of non executive directors was significant variable at the 5% level, it was found to have negative association with total voluntary disclosure. On the other hand role duality did not appear to have significant association with the dependent variable.

Regarding the three aspects of ownership structure, the results of GLS were similar to the results of OLS, the two models. None of the three aspects of ownership structure, block holders, governmental, and institutional ownership, was found to be significant at the levels 1% or 5%. The only significant variable was governmental ownership but at the 10% level. In addition, the results were identical in the sign of coefficients. The percentage of block holder ownership has a negative association but insignificant while governmental ownership and institutional ownership have positive association.

With respect to corporate characteristics, five variables were found to have significant association with total voluntary disclosure. These variables are cross listing, auditor type, firm size, profitability, and gearing. The results of GLS are identical with the both models of OLS. The only difference is related to firm size that was found, using GLS, to be positively significantly associated with total voluntary disclosure at the 1% level, not at the 5% level as it is suggested with OLS. Moreover, the results of GLS confirm that there is no significant relationship between total voluntary disclosure and both of industry membership and liquidity.

From the above discussion, it can be noticed that there is agreement between the results of OLS and GLS about the significant variables related to ownership structure; Governmental ownership at the 10% level; and corporate characteristics; cross listing, auditor type, profitability, gearing, and firm size. The level of significant was varying in respect to firm size, 5% with OLS and 1% with GLS.

On the other hand, the results of OLS and GLS are different regarding the corporate governance characteristics. While GLS indicated that four variables; namely the existence of family members on the board, board size, the proportion of non executive directors, and the presence of foreign members on the board; were identified as significant determinant of total voluntary disclosure. The results of OLS; in both employed models, indicated that board size does not have significant relationship with total voluntary disclosure. In addition, there are different results about the proportion of nonexecutive directors which it was found be insignificant in the second model, normal scores, while the first model and GLS indicated that it is significantly associated with total voluntary disclosure. However, the three models agree about the direction of such relation, negative association.

In the light of above results and following the fourth approach of Draper (1988), it was decided to go through further analysis to clarify the conflict of the results of OLS and GLS and to provide sensitivity analysis in the current study. The following paragraphs provide details of the further analysis.

8.5.3 Further Analysis

Although transformation can be used to deal with the violation of classical linear regression assumptions, researchers may face a number of problems when transforming their data and therefore some general guidelines should be followed (see, Hair et al 1998). However, the existence of outliers may affect the results even with transformed data. Therefore it is recommended to employ statistical techniques that put less emphasis on such outliers. In this regard, Cooke (1998) points out that consideration should be given to using generalised maximum likelihood estimators; M – estimators. In addition, robust regression analysis such as quantile regression is another example of those techniques that focus on minimizing the sum of absolute residuals not the sum of squared errors as in OLS (Salama, 2005). In the current study, we employed two additional tests; Tobit regression and quantile regression.

8.5.3.1 Tobit Regression

As indicated before, the dependent variable, total voluntary disclosure, is non negative variable. All values of the total voluntary disclosure are positive. In addition none of companies investigated in the current study scores zero, the minimum score was 0.0682 and the maximum score was 0.7608 as shown in table 7-11. That means our dependent variable is limited dependent variable, both left censored and right censored, that may causes bias in the results of classical linear regression. Tobit regression generates a model that predicts the outcome variable to be within the specified range (See: UCLA). The Tobit model is one of limited dependent variable regression models that may be suitable in this case (Tobin, 1958 and Gujarati, 2003).

Tobit regression provides Pseudo-R squared. In such regression, the model estimates are maximum likelihood estimates which are reached through an iterative process. There are many formula or methods to compute Pseudo R square. In the current study, it is computed based on McFadden's method which is used in STATA and allowed for negative pseudo-R^2. The Pseudo-R square is not equivalent to R square in OLS and therefore one cannot compare both of them[3]. As a further analysis, we use censored regression (Tobit) as a non parametric analysis to retest our model. STATA provides opportunity to employ Tobit as censored regression. Table 8-13 shows the results.

As seen in table 8-13 four variables of corporate governance characteristics were identified as significant determinants of total voluntary disclosure. Two of these variables, namely the existence of family members on the board and the presence of foreign members on the board, were significant at the 1% level. The other two variables, namely board size and the proportion of non executive directors were found to be significant determinants of total voluntary disclosure at the 5% level but with different directions; board size was positive association and the percentage of non executive directors was negative. The only variable of corporate governance that found to be insignificant was role duality. As such the results of Tobit regression confirm the results of GLS in respect of corporate governance characteristics.

Concerning the three aspects of ownership structure, the results of Tobit regression were identical with the results of OLS and GLS. Governmental ownership was found to be insignificant variable at the 1% and 5% level but it was marginally significant at the 10% level. Block holder ownership was found to have a negative association with total voluntary disclosure but insignificant and institutional ownership was found to have positive association but also insignificant.

As for corporate characteristics, there was no difference between the results of GLS and Tobit. The five significant variables of corporate characteristics in OLS and GLS; namely

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3 For more details see http://www.ats.ucla.edu/stat/mult_pkg/faq/general/Psuedo_RSquareds.htm

cross listing, auditor type, firm size, profitability, and gearing; were found also to be significant at the 1% level using Tobit regression.

Table 8- 13 Tobit regression results

Number of obs.	182.000
LR chi2(15)	244.710
Log likelihood =	211.764
Prob. > chi2	0.000
Pseudo R2	-1.369

TVDS	Coef.	t	P>t
Family members on the board	0.1108	5.390	**0.000**
Role duality	0.0179	1.270	0.207
Board size	0.0067	2.400	0.018
Non executive directors	-0.1125	-2.150	0.033
Foreign members on the board	0.0574	3.440	**0.001**
Block holder ownership	-0.0003	-1.180	0.238
Governmental ownership	0.0004	1.670	0.097
Institutional ownership	0.0004	0.710	0.480
Cross listing	0.0921	4.140	**0.000**
Auditor type	0.0460	3.100	**0.002**
Industry membership	0.0191	1.070	0.285
Firm size	0.0248	3.990	**0.000**
Profitability	0.0221	3.360	**0.001**
Gearing	0.0520	3.430	**0.001**
Liquidity	0.0098	1.020	0.312
_cons	0.0375	0.640	0.526
/sigma	0.073357		

Obs. summary: 1 left-censored observation at TVDS <=.0681818
180 uncensored observations
1 right-censored observation at TVDS >=.76086962

8.5.3.2 Quantile Regression

Koenker and Bassett (1978) introduce Quantile regression methods which offer a mechanism for estimating models for the conditional median function and the full range of conditional quantile functions. Quantile regression methods are looking for minimizing the sum of the absolute residuals not the sum of squared residuals as in classical linear regression. Contrary to the classical regressions techniques and M estimators that deal with variable means, Quantile regression focuses on the median. Koenker and Hallock (2001) explain that:

> *"Just as we can define the sample mean as the solution to the problem of minimizing a sum of squared residuals, we can define the median as the solution to the problem of minimizing a sum of absolute residuals. The symmetry of the piecewise linear absolute value function implies that the minimization of the sum of absolute residuals must equate the number of positive and negative residuals, thus assuring that there are the same number of observations above and below the median.* (p.145)

Regression quantile methods provide; through supplementing the conditional mean with an entire collection of conditional quantiles, a much more complete statistical analysis of the stochastic relationships among variables. Moreover, they are more robust against possible outliers; skewed tails; and heteroscedasticity, and can be computed via traditional linear programming methods. In addition such methods provide wider explanation of the impact of independent variables on the dependent variable than traditional regression (OLS) that focus on the mean (See: Buchinsky and Hahn (1998), Koenker and Hallock, 2001).

> *"The quantile regression results offer a much richer, more focused view of the applications than could be achieved by looking exclusively at conditional mean*

models. In particular, it provides a way to explore sources of heterogeneity in the response that are associated with the covariates." (Koenker, 2005, P.25)

As such, this feature of Quantile regression is likely to be particularly helpful in the context of voluntary disclosure in the current study. Therefore, it was decided to employ Quantile regression in order to check the results of OLS, GLS and Tobit. STATA provides quantile regression as one of non parametric analysis. Table 8-14 shows the results of Quantile regression.

As can be seen from the table, the results of quantile regression confirm the results of GLS and Tobit regarding the characteristics of corporate governance. Role duality is the only variable of board characteristic that found to be insignificant. All other board characteristics were found to be significantly associated with total voluntary disclosure; the presence of family members on the board (at the 1% level), board size, the percentage of nonexecutive directors, and the existence of foreign members on the board (at the 5% level). These significant variables have positive association with the dependent variable (TVDS) except the percentage of non executive directors that found to have negative association.

Concerning ownership structure, quantile regression results indicate that none of the three aspects of ownership was found to be significant. Similar to the results of OLS, GLS, and Tobit, block holder ownership was found to be insignificant but with positive sign not negative and institutional ownership has positive association with total voluntary disclosure but also insignificant. On the other hand, quantile regression provides contradictory result to the other techniques; OLS, GLS and Tobit; regarding governmental ownership. As indicated in the table, governmental ownership was found to be insignificant variable. However, it may be worth to mention that the reported significant association between governmental ownership and total voluntary disclosure using OLS, GLS, and Tobit was weak (marginally significantly at the 10% level).

Table 8- 14 Results of Quantile regression

Median regression		
Raw sum of deviations 20.15613 (about .27272731)	No. of obs.	182
Min sum of deviations 10.78453	Pseudo R2	**0.465**

TVDS	Coef.	t	P>t
Family members on the board	0.0974	3.630	**0.000**
Role duality	0.0114	0.580	0.561
Board size	0.0088	2.330	**0.021**
Non executive directors	-0.1782	-2.370	**0.019**
Foreign members on the board	0.0431	2.000	**0.048**
Block holder ownership	0.0002	0.520	0.605
Governmental ownership	0.0005	1.450	0.148
Institutional ownership	0.0013	1.620	0.108
Cross listing	0.0883	2.690	**0.008**
Auditor type	0.0542	2.620	**0.010**
Industry membership	0.0083	0.340	0.736
Firm size	0.0000	4.280	**0.000**
Profitability	0.0007	2.540	**0.012**
Gearing	0.0300	3.390	**0.001**
Liquidity	-0.0031	-0.580	0.565
_cons	0.2258	3.440	0.001

With reference to corporate characteristics, quantile regression provides identical results to the other techniques. The same five significant variables, namely cross listing, auditor type, firm size, profitability, and gearing were found to have significant association with total voluntary disclosure at the 1% level; except firm size which it was significant at the 5% level. Similar to the other statistical techniques employed in the current study, industry type and liquidity were found to be insignificant variables to explain the variation in total voluntary disclosure. The difference here is related to the sign (direction) of the liquidity it was negative not positive as in other techniques.

As such, the further analysis using Tobit and Quantile regression supports the results of GLS; except governmental ownership under the quantile regression. This is adding to the robustness of the results. The following section discusses the results of the different statistical techniques employed in the current study.

8.6 Discussion of statistical results

This section discusses the results of the statistical results to identify the determinants of total voluntary disclosure by testing the hypotheses of the current study. Firstly it starts with the corporate governance characteristics and then the aspects of ownership structure followed by the firm characteristics. Tables 8-15 , 8-16 , and 8-17 provide comparison among the results of employed statistical techniques.

8.6.1 Corporate governance characteristics

Five variables related to board characteristics have been investigated in the current study using bivariate and multivariate analyses. A summary of the results of the statistical employed techniques is presented in Table 8-15

Family members on the board Both bivariate and multivariate analyses indicate that the existence of family members on the board is significant variable. As can be seen in the table 8-15, there is agreement among all statistical techniques about the positive significant association of the existence of family members on the board with total voluntary disclosure at 99% confidence level. This means that companies with family members on the board are willing to disclose more information voluntarily in their annual reports. This result is consistent with Ali et al (2007) who indicate that US family firms make better disclosure than non family firms and Chen et al (2008) who find that family companies disclose more earnings warnings. Our results also are in line with the argument of Wang (2006) who challenged the traditional view of the greater incentives of family companies to opportunistically manage earnings. However, such strongest positive association is inconsistent with the evidence from prior disclosure studies in emerging capital markets, such as Haniffa and Cooke (2002); Ghazali and Weetman (2006) in Malaysia and Ho and Wong (2001a) in Hong Kong; that report negative significant association between the proportion of family members on the board and the extent of total voluntary disclosure in the annual reports.

Table 8-15 Board characteristics: results summary

Corporate Governance Variables	Bivariate analysis	OLS		GLS	Tobit	Quantile
		Model 1	Model 2			
Family members on the board	***	***	***	***	***	***
Role duality						
Board size	***			***	**	**
Non executive directors		(-) **		(-) **	(-) **	(-) **
Foreign members on the board	***	***	***	***	***	**

*** Significant at 1% ** Significant at 5%

The positive association of family members with total voluntary disclosure is considered to be interesting result since it suggests that some determinants of voluntary disclosure practice in emerging capital markets are similar to those in developed countries. Such positive association can be explained by the key role played by these companies, as part of private sector, in the Egyptian program for economic reform. As indicated in chapter three, the

CASE cooperates with the top ten listed companies, which includes a number of family - led companies, to increase disclosure and transparency and to enhance corporate governance practices. In addition these companies are not closed companies and benefit from banking loans and trading. So these publicity traded family companies are in the public eye which may encourage them to reduce the political costs by providing more disclosure for different stakeholders. Moreover, family owners may have greater litigation and reputation cost concerns (Chen et al, 2008). In addition, such companies aim to legitimize themselves by disclosing information more than the requirements. Additional explanation for such relationship is the management desire to avoid or reduce the adverse effects of the negative impression that potential investors may feel about the power of family members to influence the decision making. Furthermore, companies with family members on the board aim to reduce the severity of the second type of agency problems that arises between controlling and non controlling shareholders (Ali et al.; 2007). Based on the statistical results, the hypothesis ***H1.3*** in the current study is accepted.

Board leadership (Role duality) The insignificant association of the role duality in parametric and non parametric tests in the bivariate analysis is confirmed by all statistical methods employed in the multivariate analysis. The table 8-15 indicates that role duality has a positive association with the extent of voluntary disclosure but insignificant. The results suggest that the variation in the extent of voluntary disclosure in the annual reports of the most active Egyptian listed companies cannot be explained by the separation between the CEO and the chairman. This result is consistent with Arcay and Vazquez (2005) in Spain; Cheng and Courtenay (2006) in Singapore, Ghazali and Weetman (2006) in Malaysia and Barako et al (2006) in Kenya; who report lack of a significant relationship between role duality and the extent of voluntary disclosure. However, it contradicts with the findings of

Haniffa and Cooke (2002) and Gul and Leung (2004) who reported a significant negative relationship between role duality and the extent of voluntary disclosure in the annual reports.

As indicated before the role duality is the dominant form in the Egyptian business environment. About 75% of the investigated companies have role duality. As mentioned before, the Egyptian code of corporate governance, which is just guidelines not requirements, recognises this issue in its paragraph 3.6 and encourages companies with role duality to appoint a non executive vice chairperson. As such based on the statistical results we reject the hypothesis ***H1.1*** of the negative association between role duality and the extent of voluntary disclosure in the annual reports.

Board size Consistent with the results of bivariate analysis, the findings from the panel data analysis GLS (at 1% level), Tobit and Quantile (at 5% level) indicated that the size of the board of directors is a significant variable. This suggests that companies with large board size disclose more information voluntarily in their annual reports. Our result is consistent with Laksmana (2007) who reports a positive association between the size of the board and the extent of voluntary disclosure of executive compansation. The finding is also in line with the evidence from prior studies that board size affect the quality of financial reporting e.g. Beasley (1996); Beasley and Salterio (2001); and Klein (2002). However, it is contradictory to the evidence presented by Arcay and Vazquez (2005) and Cheng and Courtenay (2006) of no association between board size and the level of voluntary disclosure.

The explanation of this positive association may be based on the expertise diversity on the board; including financial reporting expertise; that provides greater knowledge base. With such knowledge base the members are willing to legitimize themselves and their company by disclosing more information voluntarily as a signal directed to the stakeholders. In addition, the more board members, the higher possibility to represent the view of different stakeholders. As such, based on the empirical findings we accept the hypothesis ***H1.5*** of the positive association between board size and the extent of voluntary disclosure in the annual reports of the most active Egyptian listed companies.

The proportion of non executive directors As shown in table 8-15 the bivariate and multivariate analyses provide different results regarding the significance and the direction of the association between the percentage of non executive directors and the extent of voluntary disclosure. While the findings of the bivariate analysis indicate that it was found to be positively associated and insignificant, the different statistical techniques employed in the multivariate analysis show negative association of the percentage of non executive directors with the dependent variable. All statistical methods, except the OLS using normal scores, found significant association between the percentage of non executive directors and the dependent variable at the 5% level.

However, the findings conflict between the bivariate and multivariate analysis has been noticed in a number of disclosure studies and may be attributed to the effect of other variables in the model or to the statistical significance being overstated by the correlations used in the bivariate analysis (Hossain et al., 1994). Although the correlation coefficients in table 8-9 and 8-10 show that the current study does not face serious multicollinearity problem, it can be noticed that the highest correlation coefficient; in each of Pearson and Spearman, was between the percentage of non executive directors and board size; about 49% and 55% in Pearson and Spearman respectively. To verify that including the percentage of non executive directors did not affect our conclusion about the direction and the significance of other variables, it was decided to run the panel data analysis of GLS without this variable. The results; presented in the appendix 8-1; indicate that there was no change in the direction or the significance of any investigated variable. The differences were in Wald chi2 (14); 504.16; and the level of significance of board size that was 10% not 1%; and governmental ownership that was 5% not 10% level.

The proportion of non executive directors was the only variable of corporate governance characteristics that has negative association with the extent of total voluntary disclosure. The findings of multivariate analysis suggest that the extent of total voluntary disclosure decrease with the higher percentage of non executive directors. This result is consistent with the finding of Eng and Mak (2003) and Barako et al (2006) who provide evidence of negative significant association of outside directors on the board and voluntary disclosure in Singapore and Kenya respectively. However, it is in contrast to the findings of Chen and Jaggi (2000) and Cheng and Courtenay (2006) who document positive association and also in contrast with Haniffa and Cooke (2002) who report negative but insignificant association.

The different findings may be attributed to the different role that non executive directors play on the board in different countries. The members of the board are selected by the main shareholders, block holders, or the chairman of the board. As such non executive directors may know each other as well as knowing the directors of the company before appointment. Consequently, their independence that may lead to the expected high level of disclosure and transparency is questionable (Crowther and Jatana, 2005). In addition, those directors may represent the interest of shareholders or other parties who select them; not all stakeholders; and may have access to the required information. Therefore they may play a substitute monitoring role to disclosure not a complementary role to disclosure (Eng and Mak, 2003). The findings of the current study confirm these arguments especially in emerging capital markets and developing countries. Based on the current findings, one can accept the hypothesis ***H1.2*** of the association between the percentage of non executive directors and the extent of total voluntary disclosure.

The presence of foreign members on the board As indicated in table 8-15 there was agreement between bivariate analysis and the multivariate analysis about the positive significant association of the presence of foreign members on the board with the extent of total voluntary disclosure in the annual reports of investigated companies. This variable was found to be significant at the 1% level using the different statistical methods employed in the current study, except Quantile regression, it was significant at the 5% level. Since foreign members are representatives of foreign investors, this finding is considered to be consistent with the evidence from prior studies of the positive effect of foreign ownership on the extent of voluntary disclosure.

This result suggests higher level of voluntary disclosure in the annual reports of companies with foreign members on the board than companies without foreign members on the board. This result can be explained by the familiarity with western disclosure pattern that generally impose disclosure requirements more than the requirements in emerging capital markets. In addition, based on stakeholder theory, those members are aware about the information needs of different stakeholders and have a good knowledge about how to deal with their information needs. As well signalling theory provides support for this result since companies with foreign members on the board are willing to distinguish themselves and their managerial capabilities from other companies by adopting disclosure pattern similar to the western pattern. Based on the finding of the current study, we can accept the hypothesis ***H1.4*** Of the positive association between the presence of foreign members on the board and the extent of voluntary disclosure in the annual reports of the most active Egyptian listed companies.

8.6.2 Ownership structure

Table 8-16 shows the results related to the three ownership aspects investigated in the present study, block holder ownership, governmental ownership, and institutional ownership. As can be seen from the table the results indicate weak association between ownership structure and the extent of total voluntary disclosure. the following paragraphs discuss the results of each aspect.

Table 8- 16 Ownership structure: summary of results

Ownership Structure	Bivariate analysis	OLS Model 1	OLS Model 2	GLS	Tobit	Quantile
Blockholder ownership	**(+)					
Governmental ownership	**(-)	*(+)	*(+)	*(+)	*(+)	
Institutional ownership						

** Significant at 5%, * Significant at 10%

Block holder ownership The findings in table 8-16 show conflict in the results of both bivariate and multivariate analysis in the direction and the significance of the association between the percentage of block holder ownership and the extent of total voluntary disclosure. According to the bivariate analysis; Spearman coefficients; it was found that this variable is positively significant at the 5% level. On the other hand, all statistical methods employed in the multivariate analysis indicate that there is no significant relationship between the block holder ownership and the dependent variable. In addition all methods, except Quantile regression, showed that the direction of this relation is negative.

This finding suggests that the percentage of shareholders who own 5% or more is not influencing the level of voluntary disclosure. Our result is consistent with the evidence provided by Eng and Mak (2003) that different types of block-holder ownership (individuals, institutions/corporations and nominees) are not related to voluntary disclosure. However, our finding is in contrast to Huafang and Jianguo (2007) who provide evidence of positive association between the block holder ownership and the voluntary disclosure in China. And also it is contrast to the findings of Schadewitz and Blevins (1998) and Mitchell et al (1995) who report negative association between the level of disclosure and ownership concentration. However, it may be worth to mention that relationship between block holder ownership and voluntary disclosure may be affected by other factors such as the identity of block owners; i.e. insider, outsider, governmental agency; and the corporate performance. Although there is no high correlation between the three aspects of ownership structure, the non-significance of block holder ownership may be partly explained by including governmental and institutional ownership in our model (Ghazali, 2004). Based on the results of multivariate analysis, we can reject the hypothesis ***H2.1***. of the negative association between block holder ownership and the extent of voluntary disclosure in the annual reports of the most active Egyptian listed companies.

Governmental ownership Another difference between bivariate and multivariate analysis was related to governmental ownership. According to the results of bivariate analysis, governmental ownership was negatively associated with the extent of voluntary disclosure. In contrast, the different statistical methods employed in multivariate analysis; except Quantile regression; reported positive association with the extent of voluntary disclosure; marginally significant at the 10% level. The finding of multivariate analysis suggests that companies with higher percentage of governmental ownership disclose more information voluntarily. This is consistent with the evidence provided by Suwaidan (1997) in Jordan and by Eng and Mak (2003) in Singapore. However, our result is contrast to the result of Ghazali and

Weetman (2006) who document insignificant association of the governmental ownership with the level of voluntary disclosure in Malaysia.

A possible explanation for this finding is that these companies, with high proportion of governmental ownership, were selected to be privatized and therefore they were listed in the stock exchange. As indicated before, some of these companies were partially privatized and some are still waiting. Such companies need to attract investors from private sectors and disclosing more information is one of the methods that can be used in this regard. In addition government as owner of these companies may have incentives to encourage these companies to adopt disclosure pattern similar to the best companies. By doing this government signals to the market and to international organizations; such as the World Bank, its interest and support to adopt and encourage companies to follow the best practices. Managers themselves in such companies may have incentive to signal their managerial capabilities to the market. Based on stakeholder theory, government as an owner of such companies is accountable to the public and therefore it may enforce managers to disclose more information that meet information needs of different stakeholders. Based on our findings we accept the hypotheses ***H2.2*** of the association between governmental ownership and the extent of total voluntary disclosure in the annual reports of the most active Egyptian listed companies.

Institutional ownership Both of the bivariate and multivariate analyses present identical results in regard to effect of institutional ownership on the extent of voluntary disclosure in the annual reports. Although it is positively associated with the dependent variable, institutional ownership was found to be insignificant variable in all statistical methods employed in the current study. This finding suggests that the percentage of shares held by institutional investors does not have a significant influence on the extent of total voluntary disclosure in the annual reports of the most active Egyptian listed companies.

However, our result is contrast to the evidence provided by Barako et al (2006); in Kenya; and Guan et al (2007); in Taiwan; who provide evidence for the positive association between institutional ownership and the extent of voluntary disclosure. It is also contradictory to the negative association reported by Schadewitz and Blevins (1998) in Finnish firms. The non significant association between institutional ownership and voluntary disclosure in the current study may be attributable to the accessibility of information that institutional investors have through their representative on the board. Based on the results of the statistical analysis, we can reject the hypothesis ***H2.3*** of the association between the percentage of institutional ownership and the extent of total voluntary disclosure in the annual reports of the most active Egyptian listed companies.

8.6.3 Firm Characteristics

As indicated in chapter two, firm characteristics represent the main investigated determinants of voluntary disclosure in the prior studies. This section discus the results of bivariate and multivariate analyses related to the firm characteristics. Table 8-17 summarizes the statistical results of all statistical method employed in the current study on firm characteristics.

8.6.3.1 Structure-related variables

Firm size Both bivariate and multivariate analysis provided identical results regarding the relationship between firm size and the extent of total voluntary disclosure. As indicated in table 8-17 firm size was found to have positive association with total voluntary disclosure at the 1% level; the significance level in OLS was 5%. This agreement between the results of employed statistical methods indicates the strong relationship between the size of the firm and the voluntary disclosure. In other words the findings suggest that larger companies as measured by total assets disclose more information voluntarily in their annual reports.

Table 8- 17 Firm characteristics: results summary

Firm Characteristics	Bivariate analysis	OLS		GLS	Tobit	Quantile
		Model 1	Model 2			
Cross listing	***	***	***	***	***	***
Auditor type	***	***	***	***	***	***
Industry membership	***					
Firm size	***	**	**	***	***	***
Profitability	***	***	***	***	***	**
Gearing	***	***	***	***	***	***
Liquidity	(-) **					

*** Significant at 1% ** significant at 5%

Our results are consistent with the evidence from prior disclosure studies about the positive association between firm size and voluntary disclosure, for example, Haniffa & Cooke, (2002); Naser et al.; (2002), Ferguson et al.; (2002); Eng and Mak, (2003), Ghazali and Weetman (2006); Barako et al.; (2006); Alsaeed, (2006) Boesso, and Kumar, (2007); and Agca and Onder (2007).

Such strong association can be explained based on the political economic approach. Large companies are in the public eye. As indicated in chapter three, the Egyptian government and CMA expect that, and encourage, large companies will play a viable role to lead the Egyptian market toward transparency and applying the best practices of corporate governance. Furthermore, the society expects specific contributions from these companies, especially the activities of social responsibility. Therefore, managers in these companies may have more incentives or pressure to include their annual reports more information voluntarily. The reason for following such pattern of disclosure may be to legitimize themselves and their companies, in addition to reduce political costs (Cooke, 1989; and Camfferman & Cooke

2002) and also the higher agency costs that may face them (Jensen and Meckling, 1976). Generally, large size companies have variety of stakeholders who are willing to get more and different information. Based on the relative power of stakeholders managers may respond to such information needs by disclosing information more than the requirements.

Unlike small size companies, the cost benefit analysis of the high level of voluntary disclosure in the annual reports of large size companies indicates that the cost of such discretionary disclosure is justified. The proportion of disclosure costs is smaller for larger companies (Lang and Lundholm, 1993; Verrecchia 2001) in addition to the desire to reduce the cost of capital (Botosan 1997; Lang and Lundholm, 1993). In general, more disclosure may lead to more competitive advantages (Buzby, 1975; Dye 1985; Meek et al, 1995). Based on the finding of the current study the hypothesis ***H3.1.a*** of the positive association between firm size and voluntary disclosure is accepted.

Gearing once again there was agreement among the results of bivariate and multivariate analyses about the significance of gearing variable. As indicated in table 8-17 The results of the four statistical methods indicate that gearing has positive significant association; at the 1% level; with the extent of total voluntary disclosure in the annual reports of the most active Egyptian listed companies. This finding suggests that companies with higher gearing ratio disclose more information voluntarily in their annual reports. Managers in such companies are more willing to use voluntary disclosure as one of mechanisms to deal with the risk arising from high gearing ratio. The finding of the current study is consistent with the findings of Malone et al 1993; Ng and Koh 1994; Hossain et al 1995; Naser et al 2002; and Camfferman & Cooke (Netherland) 2002) who documented evidence of the positive association of gearing ratio with the extent of disclosure. However, it contradicts with the results of other studies that concluded insignificant association between gearing ratio and the extent of disclosure; e.g. Chow & Wong- Boren 1987; Wallace et al 1994; Raffournier 1995; Wallace& Naser 1995; Ahmed 1996; Chen & Jaggi 2000; Depoers 2000; Camfferman & Cooke (UK) 2002; and Haniffa & Cooke 2002, Ghazali and Weetman 2006). The current result of positive relationship between gearing ratio and voluntary disclosure is consistent with the theoretical argument of agency theory since companies with higher gearing ratio may use voluntary disclosure to reduce agency costs. In addition, Such disclosure will help in mitigate the adverse effects of perceiving highly geared companies, by different stakeholders, as risky companies. Based on the statistical results we can accept hypothesis ***H3.1.b.***

8.6.3.2 Performance-related variables

Profitability firm profitability was also one of the significant variables in both Bivariate and multivariate analysis. As can be seen in table 8-17 profitability was positively significantly associated with the extent of total voluntary disclosure at the 1% level (5% in Quantile regression). This finding suggests that companies with high profits disclose more information voluntarily in their annual reports. This is consistent with the argument of signalling theory since companies with high profits aim to distinguish themselves from other companies by disclosing more information. In addition, by disclosing more information managers try to justify their high profits to mitigate the adverse effects of political costs. Furthermore, managers may be willing to legitimize their performance by disclosing more information.

A significant positive association between profitability and the extent of voluntary disclosure has been documented in previous disclosure studies such as Haniffa &Cooke, 2002; Ghazali and Weetman 2006; Agca and Onder 2007. However, our result is in contrast with Wallace & Naser 1995; Inchausti, 1997; Chen & Jaggi, 2000 who provided evidence of negative association between profitability and disclosure. In addition other studies provide evidence of insignificance relationship between profitability and disclosure; Wallace et al (1994), Raffounier (1995), Meek et al (1995), and Hackston & Milne (1996).

Thus based on the finding of the current study we can accept the hypothesis ***H.3.2.a*** of the association of profitability and the extent of voluntary disclosure in the annual reports of the most active companies.

Liquidity There was disagreement between the results of bivariate and multivariate analyses about the direction and the significance of liquidity variable. While it was found to be a negatively significant variable in bivariate analysis, all statistical methods employed in the multivariate analysis show that liquidity has positive association but insignificant with the extent of total voluntary disclosure. This finding suggests that liquidity does not affect the decision of voluntary disclosure.

The finding of the current study is consistent with Barako et al. (2006) who conclude that liquidity does not have a significant influence on the level of voluntary disclosure in Kenya. However, the finding is in contrast with the results of Wallace et al (1994) and Naser et al (2002) who report evidence of negative association between liquidity and disclosure and Camfferman & Cooke (2002) who provide evidence of a positive association between liquidity and disclosure. The difference between the results of bivariate and multivariate analysis may be attributable to the effect of other variables included in the model. It can be noticed that firm characteristics have interrelated impacts on disclosure (Gruning, 2007). Based on the statistical results of the multivariate analysis we can reject hypothesis ***H3.2.b*** of the association between liquidity and the extent of total voluntary disclosure in the annual reports of the most active Egyptian listed companies.

8.6.3.3 Market-related variables

Cross listing one of the strongest variables in explaining voluntary disclosure practice is cross listing. The results of all statistical methods employed in multivariate analysis confirm the results of bivariate analysis. Cross listing was found to be positively associated with total of voluntary disclosure at the 1% level. The finding of the current study suggests that the extent of voluntary disclosure in the annual reports of companies listed only in the local stock exchange is less than the extent of voluntary disclosure in the annual reports of companies with multiple listing.

The statistical results of the current study are consistent with the evidence from the majority of previous disclosure studies that document positive association of cross listing with the extent of voluntary disclosure such as Cooke (1998) and Ferguson et al., (2002). Such positive association can be explained by the familiarity with different disclosure pattern and dealing with variety of stakeholders. In general, managers of companies with cross listing are willing to distinguish; and legitimize; themselves and their companies by adopting disclosure policy similar to the one used in the efficient stock exchange. Furthermore, the cost of disclosing information more than the disclosure requirements in the local stock exchange is considered to be more justified in companies with multiple listing. Based on the statistical results of bivariate and multivariate analyses we accept the hypothesis ***H.3.a*** of the positive association between cross listing and the extent of voluntary disclosure in the annual reports of the most active Egyptian listed companies.

Industry membership although the results of bivariate and multivariate analyses agree about the direction of the relationship between industry membership and voluntary disclosure, these results were conflicted with respect to the significance of such relation. As indicated in table 8-17, while the bivariate analysis indicated that industry membership has significant influence on the extent of voluntary disclosure; all statistical methods employed in the multivariate analysis showed that this variable is insignificant. This finding suggests that there is no significance difference between the extent of voluntary disclosure in the annual reports of the manufacturing companies and non manufacturing companies listed in the Egyptian stock exchange.

The statistical results of the current study are consistent with the evidence provided by Raffournier 1995 and Eng & Mak 2003 who provided evidence of non significant association and the industry type. The statistical results do not support the hypothesis ***H.3.b*** of the association between the industry type and the extent of voluntary disclosure in the annual reports of the most active Egyptian listed companies. Therefore we reject this hypothesis.

Auditor type It can be seen from table 8-17 that both of bivariate and multivariate analyses provided identical results about the direction and the significance of auditor type and the dependent variable. Auditor type was found to have positively significant association, at the 1% level, with the extent of total voluntary disclosure in the annual reports of the most active Egyptian listed companies. This result suggests that companies audited by one of the big four audit firms voluntarily disclose information in their annual reports more than companies audited by other audit firm not one of the big four.

The statistical results support the theoretical argument of signalling theory. Companies may prefer to be audited by one of the big four audit firms to distinguish themselves. In the same time big audit firms may support and encourage their clients to increase the extent of information voluntarily disclosed in the annual reports as a signal of its own quality and reputation. It may be worth to mention here that there was increasing trend in the average of companies audited by a big firm from about 30% in 2004 to 42% in 2006. Based on the statistical results we can accept the hypothesis ***H.3.3.c*** of the association between auditor type and the extent of voluntary disclosure in the annual reports of the most active Egyptian listed companies. Having tested the research hypotheses it may be helpful to go further with our analysis to examine the association between the independent variables and each category of voluntary disclosure.

8.7 Regression analysis of voluntary disclosure categories:

This section presents the results of regression analysis of the association between the independent variables and each category of voluntary disclosure. We employ each of OLS and GLS regressions in separate seven models. Table 8-18 summarizes the results of OLS (with robust), while Appendix 8-2 presents the results of GLS regression. As shown in table 8-18 the explanatory power of each model vary among the different categories. It ranges from 29.7% for non financial information to 78.3% for corporate governance information. The second highest R squared was 60.4% for social responsibility information. However, the results in table 8-18 suggest that the determinants of voluntary disclosure vary among the seven categories. These results are consistent with the evidence from prior studies (e.g. Meek et al, 1995; Chau and Gray, 2002).

Concerning with corporate governance characteristics, the results of all models show that the existence of family members on the board associated at the 1% level with each of general information, future information, corporate governance and social responsibility. The board size associated positively with general information and corporate governance at the 5% level, and shareholders information at the 10% level. Role duality was found to be insignificant with the different categories of voluntary disclosure except shareholders and social responsibility information at the 10% and 5% level respectively. The percentage of non executive directors is negatively associated with each of financial information, shareholders information (at 5%) and corporate governance (at 10%). Also the presence of foreign members on the board was found to be a significant variable with each of non financial information, future information, and corporate social responsibility at the 1% level. The results of GLS presented in appendix 8-2 support the results of OLS and indicate a marginal significance of the presence of foreign members on the board with financial information (at the 10% level).

None of the three aspects of ownership structure was significantly associated with future information, shareholder information and social responsibility information. However, the block-holder ownership was found negatively associated with corporate governance information at the 1% level. This suggests that companies with higher percentage of block-holders disclose less information about corporate governance. However, the block-holder ownership is significantly associated with financial information at the 10% level. Governmental ownership was significant variable general and non financial information at the 1% and 10% level respectively, while institutional ownership was significantly associated with financial information only (at the 5% level). GLS results support OLS but indicate insignificant association between block-holders and financial information and also between governmental ownership and nonfinancial information. However, it indicate a negative association between institutional ownership and nonfinancial information.

Regarding firm characteristics, it is notable that there is no variable associated with all categories of voluntary disclosure. Cross listing was found significantly associated with shareholders information at the 5% level, and with each of general information and corporate governance information at the 1% level. Auditor type is a significant variable with general information (at the 5% level), future information (at the 1% level), and shareholder information (at the 10% level). While industry membership significantly associated with nonfinancial information (at the 1% level), and social responsibility (at the 5% level). However, it is negatively associated with corporate governance at the 10% level. This suggests that non manufacturing companies disclose corporate governance information more than manufacturing companies. Although firm size is a significant variable in the majority of disclosure studies, it was found to be significant only with each of financial information (at the 5% level), nonfinancial information (at the 10% level), corporate governance and social responsibility (at the 1% level). The same with profitability that was significantly associated with shareholder and social responsibility information at the 1% level, and corporate governance information at the 5% level. Gearing and liquidity were associated with positively with each of general information (at the 1% level), financial information (at the 5% level), nonfinancial information (10% and 1% level respectively) and social responsibility information (5% and 10% level respectively). However, liquidity was negatively associated with future information and shareholder information at the 1% level. Mostly, GLS results support the results of OLS but indicate an association (at the 10% level) between financial information and each of cross listing and auditor type, and between profitability and general information.

The above paragraphs provides an additional evidence from an emerging capital market of the importance of analyzing the extent of voluntary disclosure practice according to its different categories. While block holder ownership and industry membership were insignificant with total voluntary disclosure, they were negatively associated with corporate governance disclosure. Moreover, the results suggest that no single variable can explain the variation in all categories of voluntary disclosure. Due to the lack of previous studies about the voluntary disclosure practice in the Egyptian environment, caution must be taken into consideration when comparing such results with prior studies. The classification of categories and number of items in each category may affect such comparisons.

Table 8-18 summary of OLS regression results for voluntary disclosure categories

Variable	GI		FI		NFI		FUT		CG		SHI		SRI	
	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z
Family members on the board	0.180	**0.000**	0.070	0.195	-0.057	0.200	0.124	**0.001**	0.249	**0.000**	0.022	0.590	0.123	**0.003**
Role duality	0.029	0.212	-0.023	0.513	0.013	0.674	0.024	0.290	-0.007	0.728	0.045	**0.053**	0.049	**0.030**
Board size	0.010	**0.045**	0.005	0.557	0.005	0.446	0.005	0.222	0.011	**0.013**	0.008	**0.096**	0.001	0.871
Non executive directors	-0.124	0.211	-0.354	**0.015**	-0.052	0.645	0.080	0.337	-0.108	**0.097**	-0.228	**0.013**	-0.002	0.980
Foreign members on the board	0.021	0.429	0.063	0.140	0.148	**0.000**	0.092	**0.005**	-0.013	0.620	-0.045	0.120	0.152	**0.000**
Block holder ownership	0.000	0.585	0.001	**0.095**	0.001	0.353	0.000	0.431	-0.002	**0.002**	-0.001	0.197	-0.001	0.222
Governmental ownership	0.001	**0.008**	0.001	0.284	0.001	**0.088**	0.001	0.134	0.000	0.442	0.001	0.177	0.000	0.808
Institutional ownership	0.000	0.831	0.003	**0.044**	-0.002	0.115	0.000	0.827	0.000	0.586	0.001	0.299	0.002	0.114
Cross listing	0.127	**0.001**	0.089	0.128	0.068	0.151	0.046	0.278	0.185	**0.000**	0.095	**0.036**	0.003	0.954
Auditor type	0.061	**0.019**	0.057	0.108	0.030	0.378	0.103	**0.000**	0.018	0.384	0.050	**0.061**	0.021	0.450
Industry membership	-0.010	0.755	0.013	0.824	0.102	**0.001**	0.021	0.379	-0.049	**0.065**	-0.002	0.939	0.076	**0.026**
Firm size	0.006	0.558	0.036	**0.021**	0.028	**0.073**	0.007	0.412	0.032	**0.002**	0.000	0.980	0.060	**0.000**
Profitability	0.017	0.121	0.022	0.191	0.010	0.478	0.001	0.918	0.023	**0.016**	0.042	**0.000**	0.039	**0.003**
Gearing	0.080	**0.001**	0.093	**0.014**	0.063	**0.070**	0.018	0.451	0.015	0.486	0.023	0.406	0.072	**0.026**
Liquidity	0.042	**0.003**	0.041	**0.037**	0.054	**0.005**	-0.035	**0.005**	-0.018	0.182	-0.046	**0.003**	0.029	**0.080**
_cons	0.204	0.079	0.273	0.104	0.086	0.460	-0.146	0.092	-0.022	0.771	0.266	0.010	-0.361	0.002
R- squared	**0.574**		**0.435**		**0.297**		**0.533**		**0.783**		**0.303**		**0.604**	

8. 8 Conclusion

This chapter aimed to identify the determinants of voluntary disclosure practices in the annual reports of the most active Egyptian listed companies. It reports the empirical findings of the association between the extent of total voluntary disclosure in the annual reports over the four years, from 2003 to 2006, and each of board characteristics, ownership structure aspects and firm characteristics

Two types of analyses, bivariate and multivariate, were employed to analyze the data in the current study. In bivariate analysis, correlation coefficients; parametric and non parametric tests; were used to test the relation between the dependent variable; the total voluntary disclosure; and each of the continuous variables. In addition, T test and Mann Whitney tests were used as parametric and non parametric tests to test the correlation between the total voluntary disclosure and each of nominal independent variables.

The multivariate analysis was based on the regression analyses. To choose the relevant statistical technique, the data was examined to validate the assumptions of the classical regression; regression diagnostic. A case of assumption violation has been found in the current study. Therefore several approaches to deal with this violation have been decided. Specifically, five models have been employed, OLS using transformed data, OLS using normal score for all variables, GLS panel data, Tobit regression and Quantile regressions.

Based on the findings of the empirical section, it is concluded that a number of corporate governance characteristics can explain the variations in the extent of voluntary disclosure in the annual reports of the most active Egyptian listed companies over the examined period. Of the five corporate governance variables examined in the current study, only role duality was insignificant. Three board characteristics have positive association with voluntary disclosure in corporate annual report namely family members on the board, Board size and foreign members on the board. Political economic approach and isomorphism notion have been used to explain such results. However, the percentage of non executive directors was found to be negatively associated with the extent of voluntary disclosure. This result raises a question about the independence of nonexecutive directors in emerging capital markets.

Of the three ownership aspects, governmental ownership was significant variable at the 10% level. Block holder ownership and institutional ownership were not related to the voluntary disclosure in corporate annual reports. On the other hand, while industry membership and liquidity were insignificant variables, five firm characteristics were found to have a positive impact on the level of voluntary disclosure. These characteristics are firm size, profitability, cross listing, auditor type and gearing. Political cost, Legitimacy, and stakeholder theory have been used to explain the significant positive association observed between voluntary disclosure and each of these variables.

The study concludes that the determinants of voluntary disclosure vary among the different categories. There was no single variable can explain the total voluntary disclosure and each of the seven categories. Some variables that were insignificant with total voluntary disclosure such as block holder ownership and industry membership were found to be negatively associated with corporate governance disclosure. Moreover, the explanatory power of the model vary among the different categories. These findings highlights the need to analyze voluntary disclosure practice based on its different categories.

Appendix 8-1 GLS excluding non executive members

Number of obs	182	Wald chi2(14)	504.16
Number of groups	4	Prob > chi2	0

TVDS	**Coef.**	**z**	**P>z**
Family members on the board	0.1116	5.510	**0.000**
Role duality	0.0171	1.210	0.225
Board size	0.0047	1.820	**0.069**
Foreign members on the board	0.0606	3.630	**0.000**
Block holder ownership	-0.0003	-1.180	0.240
Governmental ownership	0.0006	2.170	**0.030**
Institutional ownership	0.0003	0.540	0.591
Cross listing	0.0866	3.940	**0.000**
Auditor type	0.0443	3.010	**0.003**
Industry membership	0.0215	1.220	0.224
Firm size	0.0246	4.030	**0.000**
Profitability	0.0250	3.840	**0.000**
Gearing	0.0458	3.140	**0.002**
Liquidity	0.0087	0.890	0.375
_cons	-0.0331	-0.700	0.483

Appendix 8-2 Summary of GLS results for voluntary disclosure categories

Variable	GI		FI		NFI		FUT		CG		SHI		SRI	
	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z	Coef.	P>z
Family members on the board	0.179	**0.000**	0.071	0.131	-0.063	0.126	0.097	**0.001**	0.237	**0.000**	0.024	0.511	0.126	**0.001**
Role duality	0.027	0.224	-0.027	0.406	0.012	0.662	0.023	0.268	-0.020	0.276	0.044	**0.076**	0.050	**0.063**
Board size	0.010	**0.021**	0.005	0.425	0.004	0.492	0.007	0.114	0.011	**0.002**	0.009	**0.072**	0.001	0.804
Non executive directors	-0.099	0.235	-0.380	**0.002**	-0.076	0.460	0.088	0.248	-0.138	0.034	-0.225	**0.015**	0.004	0.968
Foreign members on the board	0.022	0.409	0.064	**0.096**	0.167	**0.000**	0.086	**0.001**	-0.015	0.483	-0.043	0.146	0.154	**0.000**
Block holder ownership	0.000	0.665	0.001	0.121	0.001	0.354	0.000	0.759	-0.001	**0.000**	-0.001	0.192	-0.001	0.223
Governmental ownership	0.001	**0.006**	0.001	0.330	0.001	0.236	0.000	0.375	0.000	0.382	0.001	0.136	0.000	0.940
Institutional ownership	0.000	0.985	0.003	**0.028**	-0.002	**0.044**	0.000	0.762	0.000	0.691	0.001	0.375	0.002	0.120
Cross listing	0.122	**0.001**	0.095	**0.062**	0.055	0.211	0.036	0.278	0.186	**0.000**	0.097	**0.014**	0.001	0.975
Auditor type	0.058	**0.013**	0.060	**0.075**	0.026	0.385	0.101	**0.000**	0.009	0.627	0.051	**0.054**	0.021	0.460
Industry membership	-0.009	0.761	0.013	0.750	0.101	**0.005**	0.015	0.576	-0.040	**0.078**	-0.003	0.933	0.079	**0.019**
Firm size	0.007	0.488	0.035	**0.013**	0.027	**0.026**	0.005	0.616	0.030	**0.000**	-0.002	0.853	0.060	**0.000**
Profitability	0.019	**0.072**	0.022	0.148	0.010	0.463	0.009	0.379	0.025	**0.004**	0.043	**0.000**	0.039	**0.002**
Gearing	0.083	**0.001**	0.097	**0.005**	0.069	**0.021**	0.026	0.216	0.006	0.743	0.021	0.433	0.071	**0.013**
Liquidity	0.043	**0.004**	0.042	**0.057**	0.061	**0.002**	-0.039	**0.008**	-0.016	0.208	-0.047	**0.007**	0.028	0.117
_cons	0.179	0.058	0.303	0.025	0.124	0.288	-0.130	0.127	0.025	0.734	0.268	0.010	-0.375	0.001
Wald chi2	**252.47**		**147.68**		**82.04**		**221.35**		**662.61**		**80.05**		**280.84**	

Chapter Nine: Conclusions, Limitations and Recommendations

9.1 Introduction

The current chapter summarizes the results and conclusion from the previous chapters. It starts with section 9.2 that outlines the objective, research questions and methodology. The findings of the study are summarized in section 9.3. Section 9.4 outlines the contributions to the knowledge followed by the limitations of the study in section 9.5. The chapter ends with section 9.6 that presents suggestions for future research.

9.2 Research questions and methodology

The main objective of the present study is to study the voluntary disclosure practices in emerging capital markets. It uses sample from Egypt as an emerging capital market in MENA region that lacks enough number of disclosure studies. The study addresses the level of voluntary disclosure in annual reports of the most active Egyptian listed companies over a period of increasing awareness of corporate governance and enhancing disclosure and transparency. The study aims to answer the following questions:

1. **To what extent the Egyptian listed companies disclose more information voluntarily in their annual reports?**
2. **How do voluntary disclosure practices in the annual reports of Egyptian listed companies evolve over time?**
3. **What are the determinants of voluntary disclosure in the annual reports of the Egyptian listed companies?**

To achieve the objective of the study, a multi-paradigm approach that mix the interpretivist and functionalist approaches has been followed. Such approach provides an opportunity to employ a wider theoretical framework and to answer the research questions. The first two questions have been answered by applying a descriptive analysis of the total voluntary disclosure; and its categories; in the annual reports over the examined period. The results of the checklist; the research instrument, have been analyzed on the three levels: total voluntary disclosure, category of voluntary disclosure and item by item. Moreover, these results have been analyzed year by year to outline how voluntary disclosure practices evolved over time, and to highlight any significant difference among the voluntary disclosure practices over the years. In addition, it aims to examine the effect of issuing the Egyptian code of corporate governance on the extent of voluntary disclosure. To answer the third question, the study formulated a number of hypotheses based on the proposed theoretical framework, evidence from prior studies and the Egyptian environment. These hypotheses have been tested in the empirical section using different statistical methods, OLS; GLS; Tobit; and Quantile regressions. The following section summarises the results of the study.

9.3 Findings of the study

In general the current study highlights the applicability of the political economy approach - stakeholder theory, legitimacy theory and political costs - and new institutional sociology theory in emerging capital markets. The study indicates that isomorphism concept is appropriate to study the voluntary disclosure practices in emerging capital markets especially with unfamiliarity with new patterns and concepts of disclosure and corporate governance.

Based on a sample of the 182 annual reports of the most active Egyptian listed companies and a checklist of 46 voluntary disclosure items, the results support the expectation that the level of voluntary disclosure in an emerging capital market with secretive culture is low. However, the study found a gradual increase in the extent of total voluntary disclosure and its categories over the examined period. It is also found that companies manage their voluntary disclosure policy which is not a random practice but subject to certain influences. The statistical results indicate no significant difference between the extent of total voluntary disclosure over the four years. The same was concluded regarding the different categories of voluntary disclosure. In addition we conclude that there is no effect of issuing the Egyptian Corporate Governance Code in 2005 since the results of statistical tests showed no significant differences between the extent of voluntary disclosure before and after the code. In general, the findings indicate that there is room to improve the transparency of the Egyptian capital market. the study highlights the possibility of cooperation between the capital market authority and all interested parties to enhance transparency by providing pattern of voluntary disclosure and corporate governance practice. In this regard 'comply or explain' rule may be helpful.

The statistical results indicate that corporate governance characteristics do affect the extent of voluntary disclosure in corporate annual reports. Of the five board characteristics examined in the current study, four variables were found to be associated with the level of total voluntary disclosure in corporate annual reports; three positively and one negatively. Family members on the board, board size and the presence of foreign members on the board were found to have positive significant association with the extent of total voluntary disclosure. However, the percentage of non executive directors was found to be negatively associated with total voluntary disclosure. On the other hand, the findings indicate that role duality is not related to the extent of total voluntary disclosure.

The findings suggest that ownership structure has a little effect on total voluntary disclosure in corporate annual reports. The three aspects of ownership structure examined in the current study were found to be insignificantly associated with the extent of total voluntary disclosure, except governmental ownership that was marginally significant at the level of 10%. The results of regression models indicate a negative association; except quantile regression; between block-holder ownership and voluntary disclosure but insignificant. Also institutional ownership was not related to total voluntary disclosure. Concerning firm characteristics, the findings support the evidence from the majority of prior literature of the positive association between total voluntary disclosure and each of firm size and cross listing. these results confirm to the validity of our checklist as a research instrument. In addition, the findings indicate that profitability, auditor type and gearing have positive Impact on the extent of total voluntary disclosure. However, industry membership and liquidity were not related to total voluntary disclosure.

The study provides evidence that the determinants of voluntary disclosure vary among the different categories. By employing the general model with each category of voluntary disclosure, there was no single variable can explain the total voluntary disclosure and each of the seven categories. The findings indicate that while block holder ownership and industry membership were not related to total voluntary disclosure, they were found to be negatively associated with corporate governance disclosure. However, the results prove that board characteristics, in addition to other determinants, can explain the variation in the extent of different categories of voluntary disclosure. In general, the study identified the determinants of total voluntary disclosure and highlights the need to analyze the different categories of voluntary disclosure.

9.4 Contribution to the knowledge

The contributions of the thesis can be summarized as follow:

Theoretically The results indicate that disclosure theories that originating from developed countries are applicable in emerging capital markets. Stakeholders, legitimacy and political cost theories were able to explain the variations in the extent of voluntary disclosure in the annual reports of the investigated companies in the current study. The study highlights the importance of employing a wider theoretical framework; by encompassing several disclosure theories; to get more explanation to the voluntary disclosure practices. In addition it supports the notion of looking for theoretical explanations that considered being relevant to the topic being studied. The study also indicates that the concept of isomorphism can add to the theoretical explanation of voluntary disclosure especially with the lack of disclosure pattern. Such concept may be helpful also with other forms of voluntary disclosure.

Empirically The current study contributes to the disclosure literature and corporate governance literature as follow:

- Providing evidence that companies manage their voluntary disclosure policy over time whatever regulatory changes. Although there was increasing in the level of voluntary disclosure over time the results indicate that there is no significant differences among the four years or before and after the Egyptian code of corporate governance. The researcher has traced the voluntary disclosure practices of investigated companies over four years that witnessed a number of remarkable initiatives .
- Providing evidence that the explanatory variables vary among the categories of voluntary disclosure.

- Providing a new empirical evidence of the voluntary disclosure practices from MENA region that has been subjected to few limited number of studies.
- Providing up to date evidence of the association between board characteristics and voluntary disclosure practices from an emerging capital market. Interestingly, family member on the board has a positive influence on the voluntary disclosure practices. This evidence is considered to be in contrast with the evidence from emerging capital markets. However this is must be explained in the light of the sample here is the most active companies.
- Providing checklist of voluntary disclosure items to the Egyptian capital market which can be used by interested parties to rank companies or assess their voluntary disclosure practices.
- The results of the study can be generalized to emerging capital markets in the region of Middle East and North Africa, especially in countries that have similar institutional and cultural factors.

9.5 Limitations of the study

Like all studies, the current study has some limitations that need to be acknowledged and addressed when assessing the findings of the study. This section summarized these limitations.

First, the study focuses only on the voluntary disclosure practices in corporate annual reports. Corporate voluntary disclosure can be done through other media such as corporate website and press release. Therefore the findings of this study must be interpreted in light of this limitation; the extent and trend of voluntary disclosure in this study do not represent the overall corporate voluntary disclosure practices. However, a number of practical considerations justified choosing annual reports as a channel of corporate voluntary disclosure in the current study (presented in section 2.2.2). One of important considerations is related to the time horizon of the study. The study is considered to be longitudinal since it seeks to assess the voluntary disclosure over four years.

Second, the study developed self constructed checklist to measure the extent of voluntary disclosure using the disclosure index technique. While a number of steps have been followed to lessen subjectivity in selecting information items to be included in the checklist (see section 5.5), it cannot be argued that the study is free from subjectivity. In addition, the study use un- weighted index which implies equal importance of the selected information items. However, the un-weighted approach seems to be appropriate and justified for the current study that focuses on the annual report which is general purposes, addresses total voluntary disclosure for all stakeholders not a specific type of information or user groups, and covers more than one year (See section 5.6).

Third, another limitation of this study may be related to the research sample; the most active non financial listed companies; which is not randomly selected. These companies are expected to disclose more information voluntarily and to follow the best practices of corporate governance. Consequently, caution must be taken about any attempt to generalise the findings of the study beyond the study population. The results cannot be assumed to be generalized to none traded or less actively companies. However, the most active companies are well spread across sectors and represent a significant percentage of trading value and market capitalization (see section 5.3). Therefore the findings of the current study are considered to be important and helpful to the interested parties in emerging capital markets in general and the Egyptian capital market in particular.

Fourth, while the study focuses on board characteristics, other corporate governance variables have been excluded from the current study due to data availability. For example, the characteristics of audit committee and remuneration committee.

Finally. Although the current study use a multiparadigm approach to provide descriptive analysis of voluntary disclosure practice over time in addition to identify its determinants, it is mainly classified as a quantitative research. The qualitative methods were not undertaken in the current study because it mainly aims to evaluate the extent of corporate voluntary disclosure practices in the annual reports and to test empirically the association between voluntary disclosure and a number of explanatory variables. However, using qualitative techniques, such as interviews and case studies, in addition to the quantitative one may improve our understanding to the issue of voluntary disclosure.

9.6 Recommendations for future research

The findings and the limitations of the study recommend some research opportunities related to disclosure literature. The following paragraphs present some suggestions for future research.

First, the current study focused only on voluntary disclosure and concluded that corporate governance characteristics are significant variables. Future research can investigate the association between corporate governance characteristics and the level of compliance with disclosure requirements. In this regard more variables can be added such as audit committee and cross directorship. The relationship between voluntary and mandatory disclosure would be addressed.

Second, Future research can consider other channels of voluntary disclosure such as corporate web site. In this regard the relationship between the extent of voluntary disclosure in corporate annual report and corporate website would be examined. It may be interesting to investigate if the both channels have the same explanatory variables.

Third, future research could consider employing different research paradigm that can benefit from both quantitative and qualitative techniques. Triangulation can add more to our understanding to voluntary disclosure and financial reporting in general.

Fourth, the results of the study call for more research about the disclosure policy of family companies. In this regard future research could consider family ownership and compare the quantity and quality of disclosure practices between family controlled companies and nonfamily companies. It would be interesting if such comparison can be made using a longitudinal study. A comparative study with other countries in the region with a considerable amount of family companies would be fruitful.

Fifth, the current study covers one year after the Egyptian code of corporate governance issued in 2005. Future research could reinvestigate the disclosure practice after allowing some time for the companies to be more familiar with the best practices of corporate governance.

Six, As an alternative, future research could consider a specific type of disclosure such risk management, environmental reporting, forward looking information and corporate governance disclosure.

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Appendix 1: companies included in the sample

No.	Company name	No.	Company name
1	AIC	33	Egyptian for Tourism Resorts
2	El Ezz Porcelain (Gemma)	34	Orascom hotel and development (OHD)
3	El Ezz Steel Rebars	35	Bisco Misr
4	Giza general contracting	36	Eastern Tobacco
5	Misr Beni Suef Cement	37	Extracted Oils
6	Misr Cement (Qena)	38	Delta Sugar
7	National Cement	39	Egyptian International Pharmaceuticals (EIPICO)
8	Orascom Construction Industries (OCI)	40	Pfizer Egypt
9	Sinai Cement	41	Amoun
10	Suez Cement	42	El kahera Housing
11	Torah Cement	43	ElShams housing
12	ASEC for Cement	44	Medinet Nasr Housing
13	Alexandria National Iron & Steel	45	United Housing & Development
14	Egyptian Iron & Steel	46	Six of October Development & Investment (SODIC)
15	El Ezz Aldekhela Steel	47	Heliopolis Housing
16	South valley cement	48	Egyptian Media Production City
17	Abou Kir Fertilizers	49	East Delta flour mills
18	Egyptian Financial & Industrial	50	General Silos & Storage
19	Misr Chemical Industries	51	Middle & West Delta flour Mills
20	Paint & Chemicals industries (Pachin)	52	Upper Egypt Flour Mills
21	Sidi Kerier Petrochemicals	53	North Cairo flour mills
22	Samad Misr (Egyfrt)	54	Alexandria Mineral Oils
23	Egptian Company for Mobile Services (MobiNil)	55	Natural Gas & Mining Projects (Egypt gas)
24	Orascom Telecom Holding (OT)	56	Misr duty free shops
25	Vodafone Egypt Telecommunications	57	Arab Cotton Ginning
26	telecom Egypt	58	Arab Polvara Spinning & Weaving
27	Delta Industries (IDEAL)	59	Oriental Weavers
28	Egyptian Electrical Cables	60	El Nasr Clothes & Textile (Kabo)
29	ELSWEDY CABLES	61	Nile Cotton Ginning
30	Misr Hotels (Hilton)	62	Alexandria Spinning & Weaving (SPINALEX)
31	Orascom Hotel holding (OHH)	63	Raya Holding for Technology
32	Orascom projects & tourist development (OPTD)	64	Canal Shipping Agencies

Appendix 2

EGYPT CODE OF CORPORATE GOVERNANCE

Guidelines and Standards

October 2005

This Code was drafted by Dr. Ziad Bahaa El Din, Chairman of the Egyptian General Authority for Investment and Free Zones, with the support of Mr. Maged Shawky, Chairman of the Cairo and Alexandria Stock Exchange. An opinion survey conducted by the Center for International Private Enterprise (CIPE) contributed to preparation of the draft. Leaders in the local accounting, auditing, and general business community were consulted throughout the drafting process, which was conducted in light of the Corporate Governance Principles and Standards set out by the Organization for Economic Cooperation and Development, as well as codes recently issued in selected countries, including South Africa, Malaysia, and the Philippines. Preparation of the Code, including the drafting and comments processes, was supported by CIPE with the generous support of the United States Middle East Partnership Initiative (MEPI).

Egypt Code of Corporate Governance Guidelines and Standards

Introduction

This set of guidelines relates to principles of corporate governance in Egypt. The phrase "principles of corporate governance" is used to describe the rules, regulations, and procedures that achieve the best protection of and balance between the interests of corporate managers, shareholders, and other stakeholders.

These rules should be considered an addition to the corporate-related provisions stated under various laws - especially the Law on Shareholding Joint Stock Companies, Partnerships, and Limited Liability Companies issued by virtue of Law #159/1981; the Capital Market Law issued by virtue of Law #95/1992 and the executive regulations and decrees regarding their implementation. Yet, what makes these rules unique and different from all others stated under the abovementioned laws is that the rules governing corporate governance are neither mandatory nor legally binding; rather, they promote and regulate responsible and transparent behavior in managing corporations according to international best practices and means that strike equilibrium between various party interests. These rules also have been drafted in a manner that provides an ample explanation of the provisions. The explanation of the provisions will not use the concise legislative phrasing style generally associated with legal documents.

Egyptian corporations and their shareholders should seek to abide by these rules and apply them because the resulting benefits will be enjoyed not only by the complying corporations but will also have a positive effect on the general investment environment. Further, a major responsibility falls upon corporate external auditors and legal advisors to spur the corporate directors to abide by these rules and to observe the extent to which they are achieved. Moreover, banks, other financing institutions, and credit rating institutions should take the articles listed in the code into consideration when doing business with or evaluating corporations to determine the extent to which the provisions and content of these rules are upheld.

It should be expected that all those in charge of managing corporations, financial institutions, professional societies, shareholders groups, and directors implement and promote the provisions of this code; they should be expected to consider the implementation of these provisions an indicator of success.

1. Scope of Implementation

1.1. These guidelines are to be primarily implemented in joint-stock companies listed on the stock exchange, especially those undergoing active trading operations, and financial institutions in the form of joint stock companies; for those are the ones with ownership disbursed over numerous shareholders and necessitate a definition of the relation between ownership and management or are the ones that directly affect a vast majority. It is also applicable to companies that use the banking systems as a major source of financing – in this case compliance with corporate governance standards comes to support the rights of creditors. The rules have been drafted in such a manner so as to apply to these corporations within the framework of the provisions of the Law on Joint Stock Companies, Partnerships and Limited Liability Companies (#159/1981), the Capital Market Law (#95/1992), as well as the rules governing the listing, ongoing listing and de-listing of financial securities from the Cairo and Alexandria Stock Exchange (CASE) and other decrees and laws to be mentioned throughout this document. Thus, any reference to the terms "corporation" or "corporations" in the guidelines and standards shall indicate the corporations listed in the CASE, in addition to the financial institutions in the form of joint stock companies even if not listed in CASE, specifically: banks, insurance companies, real estate financing companies, finance leasing houses, and corporations working in the field of securities, as well as companies that obtain major financing from the banking sector.

1.2. Due to the general importance of the standards governing corporate governance for all corporations, other forms of corporations may be considered candidates for listing on the CASE or offered for public trading, thus indicating that the corporate governance standards listed in this document should be adopted in some form. These standards may be interpreted in a more abridged manner the extent to which they may be implemented in closely-controlled joint stock companies, followed by limited liability companies and, finally, partnerships. Although this method does not fit under the scope of standards governing corporate governance in other countries where their scope is limited to financial institutions and joint stock companies listed on the stock exchange, it is significant in Egypt: out of the total number of Egyptian joint stock companies, no more than 2.5% are listed in the CASE, further a limited number of those listed undergo active circulation.

1.3. From another point of view, the development of the Egyptian economy, especially the stock exchange, in recent years indicates that numerous closely-controlled joint stock companies will find their way to being listed on CASE. Thus, shareholders and management of these companies should adopt and adhere to the standards governing corporate governance as a preparatory phase to being listed, as proper qualification for public subscription, or for stock listing. As such, shareholders, corporations, creditors, and corporation staff in general bear interest in stimulating and monitoring the compliance of all forms of corporations to these standards to the greatest extent possible.

1.4. The above relates to the understanding that implementing corporate governance in the right manner is not only limited to respecting a set of rules and interpreting it literally in a restricted manner, but is also a culture and way of managing the relationship between owners of the company, its directors, and its stakeholders. Hence the interest of the whole community becomes more achievable when more people apply the code provisions.

2. General Assembly

2.1. The general assembly is composed of all corporation shareholders pro-rata to the percentage of shares held by each. Although the articles of association of a corporation may stipulate that no shareholders possessing less than a specific percentage of shares may attend the general assembly meeting, such a provision should be deemed an exception to the rule that entitles all shareholders to attend the meeting unless their number exceeds the capacity by which the corporation can provide a meeting place, in which case the stipulation may be resorted to; it should also not be a means to exclude and overrule small shareholders.

2.2. Shareholders should be encouraged to attend the corporation's general assembly meeting; moreover, the meeting date and place should be set in a manner facilitating and encouraging their attendance.

2.3. Each subject matter on the agenda of the ordinary or extraordinary general meeting is to be accompanied by an adequate description in a manner enabling the shareholders to make their decisions based upon the information furnished to them. Furnishing of the information should be for the purpose of enabling shareholders to make their decisions in a sound and well-studied manner and not just as a completion of meeting formalities.

2.4. The general assembly is managed in a manner allowing full and adequate disclosure for information related to all items in the agenda to allow shareholders to express their opinions based on adequate and full information.

2.5. Voting on general assembly decisions needs to be registered in absolute accuracy. In case of disputes over the representation of some votes at the general assembly, voting on the validity or annulment of the disputed votes should be made and presented later to the concerned administrative or judicial party; meaning that the proceedings of the general assembly should continue in any case.

3. Board of Directors (BOD)

3.1. The BOD of a joint stock company assumes the role of managing its affairs based upon authorization delegated by the general assembly; as a result, the final responsibility for the company remains under the board even if it constitutes committees or authorizes other bodies or individuals to undertake its operations.

3.2. Despite the fact that the BOD of a corporation is composed of representatives nominated from among various groups of shareholders, whenever a member of the board is designated, he/she must consider him/herself as a representative of all the shareholders and obliged to act in the interest of the corporation and all shareholders and not just that of the group being represented or having voted for the designation.

3.3. Egyptian laws stipulate that the BOD of a corporation shall be nominated for the purpose of representing the shareholders and the formation of the board should be representative of capital distribution. However, the rules governing voting enable the general assembly majority group to designate the entire board via voting for each nominee separately; accordingly, corporate governance necessitates that an accumulative system be adopted, in voting for BOD members, or capital distribution should be considered in any other way, so that the final result can be a reflection of the proportional representation of shareholders on the board. A summarized curriculum vitae for each BOD nominee should be submitted to the shareholders upon being called to vote for the board.

3.4. The BOD should include a majority of non-executive members with an appropriate mix of skills, technical, or analytical experience that is of benefit to the board or corporation. Under all circumstances, upon nomination of the non-executive board members, it must be observed that the board member will be capable of allotting sufficient time and attention to his board directorship and that it will not represent any conflict with his/her other interests.

3.5. Sufficient information and data on the corporation should be made available to new BOD members upon their designation to familiarize them with all its general aspects, points of risks, organizational structure, financial position, and everything that will enable them to assume their responsibility to the fullest extent.

3.6. The BOD undertakes the designation of the chairperson and managing director; it is preferred that the two posts not be held by the same person. Should joining the posts be necessary, its reasons should be clarified in the corporation's annual report; further, a non-executive vice chairperson should be appointed.

3.7. The BOD should closely monitor at all times the general status of the corporation and must not entrust any other person with that responsibility.

3.8. The board should lay down the mechanisms and systems ensuring corporate respect for the laws and regulations in force and compliance with the furnishing of essential information to shareholders, creditors, and other stakeholders, which should all under any circumstance, be based on objective standards.

3.9. Any entrustment made by the BOD of the corporation, be it to one of its members or to any other, should be specified in title and term of validity and should include a date on which attained results are to be presented to the board. The board should avoid delegating its authority in any manner, as this leads to weakening of its role in the organization.

3.10. The BOD members are entitled to all information and data on the corporation at the time and in the form specified by them.

3.11. The BOD members may seek an external advisory opinion on any corporation matter at its own expense provided that the majority of members approve such an act; this will be subject to the observance of the provisions averting conflict of interests stated under these provisions.

3.12. The corporation should reward its executive managers with financial remuneration in a manner allowing for the attraction and maintenance of the best qualified elements in the market. This is to be determined by forming a committee comprising mostly or wholly of the non-executive BOD members who will have the authority of proposing the executive member's financial remuneration and negotiating it with them in consultancy with the managing director; the final decision will however be of the non-executive board members. Names of the committee members will be revealed in the corporation's annual report; moreover, the head of the committee should attend the annual general assembly to answer any questions posed by shareholders on that matter.

3.13. Remuneration received by an executive BOD member should be disclosed including: remuneration, allowances, real privileges, stock options, and any other element of financial nature. Elements related to the performance of the corporation are always preferred to represent the significant portion of the total financial remuneration so that the executive board member will always be stimulated to improve his/her performance.

3.14. As for stock options in particular, consideration must be given not to incite the board on taking decisions achieving only short-run corporate interests, but also to be related with considerations that improve the corporate performance in the medium and long term.

3.15. A term of contract of an executive BOD member should not exceed three years unless for a clear and defined purpose that is to be revealed in the corporation's general assembly.

3.16. The abovementioned committee referred to in Item 3.12 should recommend the remuneration received by the non-executive BOD members provided that it is submitted to the general assembly for approval. The remuneration paid to non-executive board members should not significantly differ from one to another except if it is against specific tasks and work assigned to them or against their membership in specific committees.

3.17. The board should convene no less than once every three months. The number of conventions and the names of the members who failed to attend the meetings of the board or its sub-committees will be revealed in the corporation's annual report. Invitation to the meetings should be done on dates, at places and according to arrangements that can allow for the members to attend; moreover, all information on any matter that will be submitted to the board or any decision that should be made available to all Board members in advance of its meeting, unless there is a specific case requiring speedy submission. In this instance, only executive members or managers capable of amply explaining the matter and responding to member questions are to attend the meeting. It is preferred that ballot-voting should only be exercised on urgent matters requiring unanimous approval when regular meetings cannot be held.

3.18. The non-executive BOD members may meet with the managers of the corporation for consultation on any of its affairs with or without the attendance of the executive members, provided that they together coordinate the date of meeting and that they be informed on what will be negotiated.

3.19. The board should regularly review the corporation's internal rules of procedures to ensure their suitability and efficiency. The board is entitled to obtain all the financial and non-financial information and reports on the performance of the corporation.

3.20. The board may constitute committees comprising BOD or other members to perform particular tasks and for specific periods; these committees should be considered as means of assisting the board in performing its functions and not as a mean for divesting its responsibilities or transferring them to another body.

3.21. The process of forming the committees affiliated with the BOD should be done according to general procedures established by the board, which should include: specifying the function of the committee, its term of operation, authorities granted to it during such term and means of its monitoring via the board. Unless otherwise specified under the decision to constitute the committee, the committee should notify the board with absolute transparency of what functions it undertakes, what results it culminates and the decisions it makes. The Board is to periodically monitor the operation of the committees to ensure that it is undertaking the assigned tasks.

3.22. The Board is to constitute at minimum an audit committee consisting of a number of non-executive board members. The audit committee shall be responsible for the oversight of the internal audit department and the corporation's procedures.

3.23. It is recommended that the non-executive board members participate in the committees formed by the board and that one of them acts as its chairman. Committees may seek the assistance of external consultants in the performance of their functions at the expense of the corporation. The corporation's annual report should include a brief presentation on each committee's constitution, number of meetings, assigned functions, and accomplishments; moreover, committee heads have to attend the corporation's general assembly meeting.

3.24. The corporation's board of directors should have a corporate secretary designated upon their approval to manage all board records, minutes, and books; as well as to attend all its meetings unless otherwise requested as regards a particular subject matter. Members are entitled to communicate with the secretary during inter-meeting intervals. Authorities necessary for the secretary to assume relevant tasks must be approved by the board. It is preferred that the functions of the Secretary not be limited to their traditional understanding set forth under the Egyptian law as to simply attending assembly meetings and taking minutes, but rather extend to being an ongoing link between board members, and board members and management; in addition to being a source for any requested information.

3.25. The BOD is generally responsible for the corporation's risk management in accordance with the nature of its activity, size and market in which it operates; moreover, the board assumes the responsibility of laying down a strategy for identifying threats faced by the corporation, means of dealing with them and the degree of operational risk exercised, all of which should be clearly presented to the shareholders.

3.26 The board of directors should issue an annual report to be presented to the general assembly. The annual report is in addition to other documentations required by law. The annual report should specifically include:

- An overview on corporation's activities and its financial position.
- An overview on the corporation's next year's activities.
- Activities and results of the corporation's subsidiaries, if any.
- A briefing on the changes in the main capital structure of the corporation
- Degree of compliance with the guidelines and standards of the Egyptian Code of Corporate Governance.

4. Internal Audit Department

4.1. The corporation should have a sound system for internal audits that is established in a cooperative effort between the board of directors and the corporation management. Failure to do so will require the board to explain to the annual general assembly reasons for that failure. An internal audit department shall be responsible for the implementation of this system.

4.2. Internal audit should be managed by a full-time senior level manager who reports directly to the managing director. The internal audit manager maintains the right to communicate and consult directly with the chairman of the board and attends all internal audit committee meetings.

4.3. Designation, renewal, removal and determination of financial remuneration of the internal audit manager are to be by a decision taken by the managing director subject to the approval of the audit committee.

4.4. The internal audit manager should have necessary authorities that enable him/her to fully assume the functions of the post.

4.5. The internal audit manager should report on quarterly basis to the chairman of the board and to the audit committee. The report should include the degree of compliance of the company with the laws and rules that regulate its activity and its compliance with the rules of corporate governance.

4.6. Defining the objectives, functions, and authorities of the internal audit department, as well as the name of its manager and his assistants should be issued in a clear and detailed report to be written by the corporation's BOD.

4.7. The internal audit aims at laying down systems for evaluating the means, methods, and procedures of risk management within the corporation and for soundly implementing the rules governing corporate governance;

4.8. Internal audit mechanisms and procedures should be laid down based upon an overview and study of the risks facing the corporation, provided that the opinions and reports of the board, auditors and managers are sought and that the monitoring and evaluation processes are periodically updated.

5. External Auditor

5.1. The corporation should have an external auditor who is independent and does not have any business relationship with the corporation.

5.2. The corporation's board of directors, upon the recommendation of the audit committee, should nominate an external auditor who is efficient, has a good reputation, and appropriate experience; his/her efficiency, experience, and abilities must be commensurate to the size of the corporation, the nature of its operations, and its stakeholders.

5.3. The external auditor should be independent from the corporation and its board members. He should not be a shareholder or a board member. He/she should be appointed by a general assembly decision, during which his/her annual remunerations would be set.

5.4. The external auditor should attend the corporation's annual general assembly meeting.

5.5. The external auditor should comply with the Egyptian accounting standards and regulations, in spirit and content.

5.6. The company should not contract the external auditor to carry out any additional tasks, except upon the approval of the audit committee, subject that the additional task are not among those that will be audited or assessed by the external auditor or be in conflict with his assignment as an auditor. The external auditor's fees for the additional tasks should be relevant to his fees for external auditing, and should not represent a significant percentage of his fees as an external auditor to ensure his independence. In all cases, these additional tasks should be presented to the first general assembly of the corporation.

5.7. The external auditor should be independent and unbiased. He/she should be protected against the intervention of the board of directors. The board of directors should not be in a position to control the decision to continue his/her assignment or to decide his/her remuneration.

6. Audit Committee

6.1. An audit committee to be set up comprising at least three non-executive board members. At least one of its members should have financial and accounting expertise. If the number of non-executives on the board of directors is less than three, one or more members may be appointed from outside the corporation.

6.2. In addition to the functions mentioned in this code, the audit committee will perform the following functions:

- Evaluate the efficiency of the financial manager and other major staff of the financial department.
- Review the internal audit system and submit a report including its recommendations.
- Review financial statements before submission to the board of directors, and include its recommendations in a report.
- Review the accounting policies and include its recommendations in a report.
- Review the audit plan with the external auditor and provide its recommendations.
- Review the comments of the external auditor and follow up with corrective measures.
- Assess the qualifications, performance, and independence of the external auditor; nominate external auditor and determine his fees.
- Approve assigning additional tasks to external auditor and decide his fees for additional tasks.
- Review the plan of the internal audit department and assess its efficiency and capacity.
- Review the reports of the internal audit department, the feedback of the management regarding these reports, and the corrective measures.

6.3. Audit committee should meet periodically at least on quarterly basis. The meeting should have a specific agenda.

6.4. The corporation should facilitate the tasks of the audit committee including the approval to solicit expertise, if necessary.

7. Disclosure of Social Policies

7.1. The corporation must reveal to the shareholders, the dealing public, and its staff the policies regarding its social, environmental, occupational health and safety, and other policies at least once per year.

7.2. Declared policies should be clear and not misleading, they should include what the corporation intends to undertake as regards: the development and changes in the number and training of employees and social welfare schemes whether within the corporation or in its surrounding environment. As for health and environmental policies, they have to conform to the enforced Egyptian laws and regulations and should aim to protect the welfare of the staff and the surrounding environment. Moreover, they should be sustainable in the long term.

7.3. The corporation, its surrounding environment and the suppliers and clients dealing with it should be correlated based upon credibility, care to attain common interests and the revealing of policies and intentions; this should be done in such a manner that does not conflict with the duty of the corporation, its staff and its managers to maintain confidentiality of financial and commercial information.

8. Avoiding Conflict of Interest

8.1. Each corporation should have written rules and regulations known by the BOD members, administration, managers, and staff on the prevention of conflict of interest and should include the provisions stated in this regard.

8.2. BOD members, managers, and staff are prohibited to deal in the shares of the corporation for a certain period of time prior to the declaration of the results of its financial activity or prior to the declaration of any other information of effective financial nature. It is also prohibited to deal in the shares of the corporation after sudden incidents which have an impact on the activities of the corporation or its financial position until these changes are disclosed to the public. All of the above should be done while observing the enforced provisions of the law and the enforced rules governing listing, circulation, and disclosure.

8.3. The corporation, in conjunction with its staff and dealers, should lay down the rules governing its occupational behavior. These include:

- Rules governing dealing with the corporation whether for buying, selling or additional activities;
- Delegated authorities;
- Means of declaring new policies;
- Safety and health standards adopted;
- Sound occupational standards for dealings among staff and managers and between them and those outside the corporation.

8.4. The corporation should create an internal system for monitoring the implementation of the rules governing its occupational behavior.

8.5. In its dealings with suppliers, the corporation should seek the nomination of those at the same occupational and ethical levels observed by the corporation.

9. Corporate Governance Rules for Other Corporations

These rules mainly address the companies listed on the stock exchange, financial institutions, and companies that are financed primarily through the banking sector. However, as mentioned above, corporate governance applies to all corporations as it balances the different interests and creates a new corporate culture. Hence, the more the degree of compliance with the provisions of the code, the more the interests of the society, the partners, and the shareholders are achieved.

Non-traded shareholding companies or family business and limited liability corporations should take into consideration, in the best of their capacity, compliance with these rules.

Sole proprietorship companies should consider complying with those provisions that avoid conflict of interests, establish internal audit systems, protect the independence of legal and financial advisors and financial auditors, and ensure the disclosure of social policies.

In all cases, if non-traded shareholding companies, family corporations, limited liability companies, or sole proprietorship companies do not have the capacity to comply with corporate governance rules, they should seek less costly alternatives that meet their financial and managerial capacity while ensuring that these alternatives lead to the same results that are addressed through the corporate governance rules.